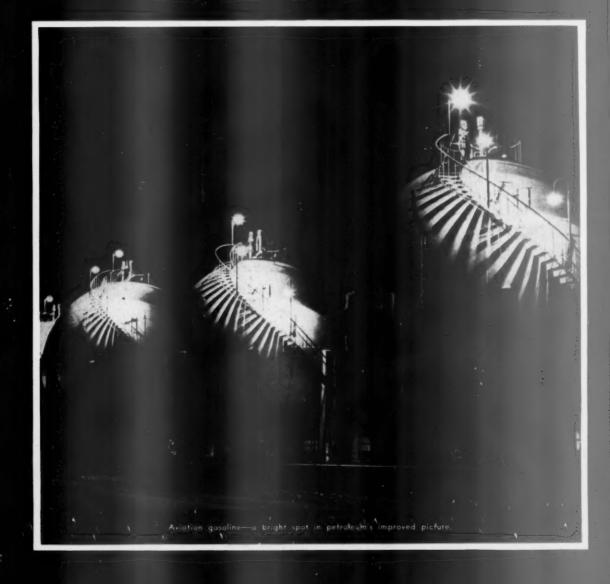
WEEK AGO

BUSINESS WEEK

YEAR AGO



ISINESS EEK

DEX

PUBLISHED BY THE MEGRAW HILL PUBLISHING COMPANY, INC.

OLIVERSITY OF MICH.

Will the peace be peaceful?

* * Peace will come again—but will it be a happy peace for America?

European plants, equipped for war with the best machinery they ever had, will begin the struggle for markets to compete with American efforts. If they produce their goods at prices that even tariff walls cannot keep out, America's prosperity will be gone, our standard of living will crumble. Peace would usher in chaos.

The only way to maintain America's prosperity is to match Europe's prices, and the only way to do that is to match Europe's costs. American labor is more skilled than European, *modern* American machinery is superior.

But 70% of American machinery is obsolete. *Now*, before the dangerous challenge comes from overseas, is the time to schedule new lower-cost equipment. If turning metal is part of your operation, we can plan with you on modern Warner & Swasey Turret Lathes that will reduce your turning costs, in many cases by 50%. But that planning should be done now, to assure a peace that will be peaceful.

WARNER
&
SWASEY
Turret Lathes
Cleveland



YOU CAN TURN IT BETTER, FASTER, FOR LESS . . . WITH A WARNER & SWASEY

Even with at top everything you want particularly Here's a

The hig equipment imple) us than lower or even 10 price is fa longer life man-hour

usiness V

A way to speed production and defense

America can't rearm with machines shut down. Isn't it practical patriotism as well as good business to buy equipment that will subject you to fewer delivery delays?

Lat top speed, delays in delivery of at top speed, delays in delivery of everything are bound to increase. Yet you want to maintain your deliveries, particularly if they are related to defense. Here's a suggestion that may help—

The highest quality in maintenance equipment (belting and hose, for example) usually costs only a little more than lower quality yet may last 25 to 50 or even 100 per cent longer. The higher price is far more than made up by the longer life. Yet it takes very few more man-hours or machine-hours to produce

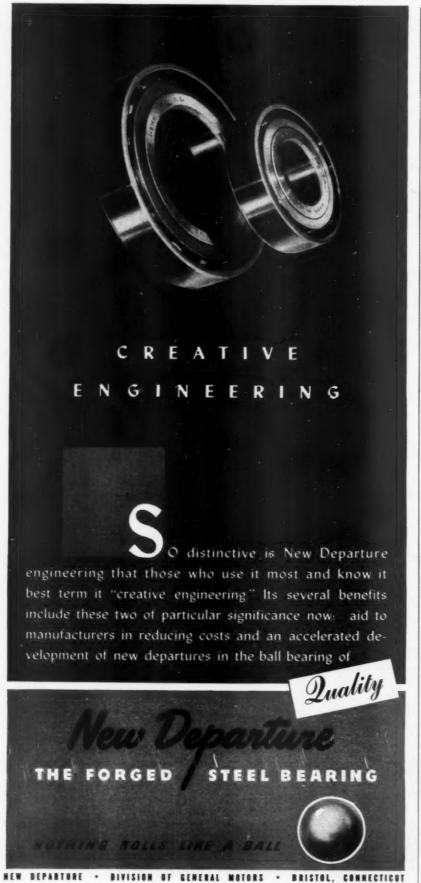
the better quality than the lower quality. Buy a better grade and you conserve machine capacity.

With lower quality you reorder more often. Each time you reorder you may be subjected to unavoidable delay. You can get the best quality now as quickly as the poorest. And the best quality, by lasting longer, reduces the frequency of reordering and therefore the frequency of delays.

The interesting fact you'll find is that the better grades of B. F. Goodrich belting, hose and other products last so much longer that they actually cost less. Therefore, when you buy quality and so save delay and speed defense, you also profit. Your Goodrich Distributor will work with you to determine the best qualities for your own operations. The B. F. Goodrich Company, Mechanical Goods Division, Akron, Ohio.

B.F. Goodrich

First in Rubber



BUSINESS WEEK

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THE PICTURES

Cover: Port Arthur, Tex., Cham. of Com. Page Description

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Allis-Chalmers	Wide World
Auction Southern	Pine Association
Bauxite	International
Secretary Perkins	Acme
Ford-NLRB Hearing	Wide World
Lead for Japan	Wide World
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Hothouse	Wide World
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Other photographs appearing in this issue were taken by Business Week photograph ers or were obtained from private source

BUSINESS WEEK . APRIL 5, 1941 . NUMBER 65

(with which is combined The Annalist and the Magazine of Business). Published weekly by McGraw-Hill Publishing Company, Inc., James H. McGraw, Founder and Honorary Chairman. Publication office, 99–129 North Broadway, Albam, New York. Editorial and executive offices, 339 W. 42nd St., New York, N. Y. James H. Mc Graw, Jr., President; Howard Ehrlich, Executive Vice-President; Maroan Britton, Vice-Chairman; B. R. Putnam, Treasurer; D. C. McGraw, Seretary; J. E. Blackburn, Jr., Director of Circulation. Allow at least ten days for change of address. All communications about subscriptions should be addressed to the Director of Circula tion, 330 West 42nd Street, New York, N. Y.

Subscription rates-United States, Mexico, and Central and South American countries \$5.00 a year \$8.00 two years, \$10.00 three years. Canada \$5.50 for one year, \$9.00 two years, \$11.00 for three years. Great Britain and British Possessions 46 shillings per year, 90 shillings three year. All other countries \$7.50 for one year, \$15.00 for three years. 20¢ per copy. Entered as second

ber 4, 1936 at the bany, N. Y., under 3, 1879. Printed in class matter Decem-Post Office at Al-the Act of March U. S. A. Copyright Graw-Hill Publish-1941 by the Mo ing Company, Inc.

PUBLICATION

A McGRAW-HILL

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THEY TELL A STORY of a man who rode through the beautiful Chessie Corridor for a week-end of golf at White Sulphur. On that week-end two big things happened...he lost his slice and he found the answer to his company's future. For on that trip he heard that beneath the beauty of that historic land lay in abundance all the things his factory needed. And all of it right next door to the major markets that made up 80% of his sales!

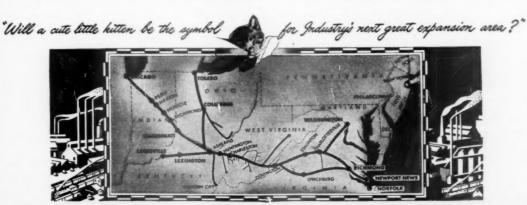
In one way or another the eyes of many industrial leaders have been opened to the importance of *The Chessie Corridor* as a territory rich in raw materials...well populated by stable, native-born workers...a land bountifully watered and well protected by mountains...an inviting land in which to *live*...Important things are happening among *The Corridor's* diverse industries—in the chemical and allied fields—in metallurgy—plastics—textiles—glass—ceramics—and half a hundred others. What these things are and what they mean to *his* business should be known by every major executive.

FACTS... for the man who makes decisions

Information on this important area is now organized and available in a new 56-page book you'll be proud to have in your library—"The Chessie Corridor

—Industry's Next Great Expansion Area."This beautiful book is a graphic survey of the resources, conditions and opportunities which beckon industry to The Corridor. Copies will be mailed to business executives requesting them from IN-DUSTRIAL DEVELOPMENT SERVICE, Chesapeake and Ohio Lines, Huntington, W.Va. Your request will be kept strictly confidential.





THE CHESSIE CORRIDOR * Served by CHESAPEAKE and OHIO LINES

DEFENSE PLANT TRANSFORMED BY SAVE-LITE WHITE PAINT



Above-Link Plant before painting. Below-AFTER painting with white Save-Lite.



Light at Link Shop Raised to 65 Foot-Candles by One Coat in Rush Job!

"MAKING Link Trainers is a precision job, and good light is vital!" says E. A. Link, Pres. Link Aviation Devices. Inc. "That's why we selected Sherwin-Williams Save-Lite white paint for reconditioning an old plant we recently took over. As the photos show, Save-Lite literally transformed the old plant into a bright, cheery workshop. One coat of this high light-reflecting paint raised lighting levels to 65 foot-candles—an increase of 35%! It covered brick, wood and cement perfectly."

Sherwin-Williams Save-Lite white paint increases working light amazingly. It has reduced errors, improved production, cut workers' fatigue and eye-strain in many plants in all lines of industry. And it is extremely economical to use because it covers so well, spreads so far and stays white so long.

WHAT IS SAVE-LITE?

Save-Lite is a scientifically-designed white finish made only by Sherwin-Williams, world's largest paint manufacturers.

Made in white only, for plant interiors where greatest light reflection is desired. It reflects nearly 90% of the light.

It reflects nearly 90% of the light.
Save-Lite stays white, Special types resist

fumes and humidity.

Covers solidly. Easily applied, has a high spreading rate—extremely economical.

NEW KEM SAVE-LITE!

Now—a quick-drying, high-hiding, gynthetic-type Save-Lite. Produces remarkable tile-like finish, stays white, resists condensation and fumes which destroy ordinary mill whites. Stands repeated washing.



SHERWIN WILLIAMS
INDUSTRIAL FINISHES

BUSINESS WEEK

and The ANNALIST

April 5, 1941

THE COVER

For the first time in many months, petroleum and gasoline prices has shown signs of strength, and demand—both civilian and multary—running far above last year's all-time high (page 22). As a consequence the men who refine the black crude into high-grade gasoline to run the engines of national defense are working overtime. Take, for example the Port Arthur, Texas, plant of the Gulf Oil Corp., where the bis spherical aviation-gasoline storage tanks, lighted at night by brillian spotlights, look like nothing so much as an artist's conception of a stag setting for the world of tomorrow.

NDMB GETS A SENDOFF

Headlines this week told how the Mediation Board settled strike sit uations. Actually, the settlements were only truces (page 15) and fina peace terms remained to be written. But the publicity served its purpose swelled the board's prestige as an aid to applying the brake to detens strikes. However, the brake was slipping at a vital point that Business Week readers have long been warned to watch—River Rouge (page 16)

THE LAST CHAPTER

This week, when the Temporary National Economic Committee issued its final report (page 17), business wasn't inclined to be much concerned about its recommendations for curbing "concentration of economic power" because it knows that chances for action now are remote. But when the defense emergency is over, business and government may be turning to the committee's "four-foot shelf" of testimony and hearing (BW—Mar.22'41,p22) for guidance in re-establishing a normal economy.

FOREIGN TRADE FINDS NEW CHANNELS

Exports are almost back to 1929 levels (page 21)—yet we have lost five of our biggest European customers behind the British blockade. Farmers flourished in the last war, but they have been pretty well squeezed out of world markets in this one. Our foreign trade is shifting into new channels—sometimes due to the blockade, but increasingly because of Washington's bold maneuvering. What's happening, and where—page 20.

THE HAT'S THE THING

Executives outside the hat industry may groan when they find out (page 26) that their wives' hats are going to be fussier this Easter. But executives in the trade are glad it's so—for they are looking forward to the biggest season in years. What's more, the industry's "stabilization commission" is helping to make it a profitable one.

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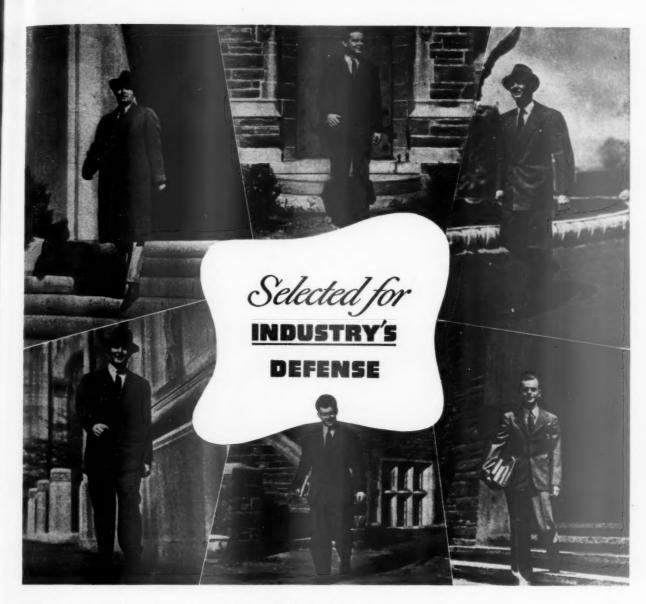
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Again many young men . . . from graduating classes of leading colleges and universities ... have been selected to train for a career in representing the American company that first offered liability insurance to business firms - American Mutual.

Each summer, several dozen young men undergo supervised training, preparatory to many months of field work under experienced insurance consultants. Those who succeed in passing a most rigid test will ultimately become servants of our policyholders. This year, more than ever before, they face an important responsibility - that of learning how best to defend American Industry against the costs and delays that accidents cause.

LESSONS IN SERVING AMERICAN INDUSTRY

Meanwhile, they are learning what mutuality means. That American Mutual is mutual in every sense owned by its policyholders, operated for its policyholders, to save them on insurance costs and accident losses.

They are learning the importance of giving a business man a constructive insurance plan. Because they will be on salary, will offer practically all liability lines, their counsel will be unbiased, comprehensive.

They are learning, too, other aspects of American Mutual's service . . . the 20% policyholder dividend that has always been returned as a share of earnings . . . accident-prevention aid by experts on industrial safety and property protection . . . nationwide claim service including specialized doctors for workmen's compensation cases ... publications which crystallize American Mutual's ever-broadening efforts to make all work safe.

Among these publications is American Mutual Magazine, source of valuable information on loss prevention in business and industry. Write for a free copy to Department C2, 142 Berkeley Street, Boston, Mass.

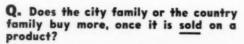


AMERICAN MUTUAL LIABILITY INSURANCE COMPANY, Home Office BOSTON, MASS. Branches in 62 of the Country's Principal Cities

Business Week . April 5, 1941

WAKE UP, AMERICA! TIME TO STUMP FOR RURAL SALES!

Are your wits sharp, gentlemen? All right, here we go.



A. The country family—partly because the farm family is larger and partly because it averages more actual spending money per year than the city family!

Q. Do retail sales figures show who is actually buying our products?

A. Not entirely. Every town and city, from 2500 to 5,000,000, sells more goods than its population buys. The extra sales represent rural buying.

Q. Are there enough of these rural families to justify our firm in making a play for them?

A. They're 44% of the American public!
—with a smaller proportion of reliefers, illiterates, etc., than in the cities. Those who prosper are actively in the market for every modern convenience, luxury, and packaged item.

Q. Can these country customers be reached as inexpensively as urban magazines reach city people?

A. Cheaper! Any manufacturer with national distribution is already geared up to sell them. The most direct route to farm sales

is the farm press. Farm Journal alone delivers an advertising page to 2,560,000 families at less cost than urban magazines.

Q. Can you prove all this?

A. Absolutely. We can give you facts never before available on actual farm-family purchases, by economic groups and by brands, on over 500 items. Ask your nearest Farm Journal office.

We urge you to join America's successful advertisers in studying this most complete analysis of rural buying.

Wake up, America! Time to Stump for Rural Sales.



WASHINGTON SQUARE, PHILADELPHIA New York, Chicago, Detroit, Los Angeles, San Francisco, Seattle

"America's LARGEST Rural Magazine"

FOF

In Tra

Wate in the tion in to the a dent's cruise, hurry to disputin of price agencie and techensive

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WASHINGTON BULLETIN

FOR BUSINESS BY BUSINESS WEEK'S WASHINGTON BUREAU

In Transition

Watch the maneuvering for position in the defense setup with the transition in planning from the short-of-war to the act-of-war stage. Since the President's return from his fish-and-think cruise, he's just been listening. In no hurry to tip his hand, he's giving ear to disputing groups regarding organization of price control and economic warfare agencies and creation of other devices and techniques essential to a comprehensive war effort.

New Price Control Agency

The Budget Bureau has worked out a plan on paper by which Leon Henderson's Price Stabilization Division would absorb Harriet Elliott's Consumer Protection Division. It is proposed to give the new agency broad powers in controlling prices. Fearing invasion of their preserves, the Agricultural Adjustment Administration, represented by Vice-President Wallace and Secretary Wickard, and Stettinius' Priorities Division in the OPM object strenuously.

Stettinius' group protests that the proposed new agency would usurp many of its vital functions because prices and priorities are closely related. The agricultural bloc is fearful of what the new agency might do. Wallace and Wickard believe that farm products should be permitted to rise at least another 10%.

One thing is sure, Miss Elliott won't head the new agency. Henderson probably will be offered the job but he may play "hard to get." Henderson is giving the impression that he needs a bigger hat.

• NDAC's Demise—The Defense Commission is quietly passing out of the picture with a transfer of most of its functions to the Office of Production Management and with the grouping of OPM and practically all other units of the defense program under the Office for Emergency Management.

Easy Does It

In the reshaping of the defense organization, Roosevelt must steer his course between New Deal pressure to subordinate business influence and the practical necessity of keeping businessmen behind his defense program. He must also contend with cross-currents of opinion within his own administration.

Lauchlin Currie, the President's administrative assistant recently returned from China, is pressing for organized intensification of economic warfare. However, the State Department is worried about disturbing relations with foreign countries unnecessarily.

Wayne Coy, who recently resigned as assistant administrator of McNutt's Federal Security Agency, is lined up as chief of the home defense unit soon to be formed. Its object is to sell the defense program and the Administration's foreign policy to the people by giving them something to do. Former Ambassador Bullitt is working with Coy on the plan.

Harry Hopkins is lease-lend administrator in fact if not in name. He sits with the President and the Cabinet committee, made up of Hull, Morgenthau, Stimson, and Knox, that steers lease-lend policy. Major General James H. Burns is Hopkins' first assistant. Other key men in lease-lend administration are Oscar Cox, young Treasury attorney who wrote the lease-lend bill; Philip Young, son of Owen D.; and George A. Haas, Treasury statistician.

Homing Lawmakers

Congress is closing up shop until after Easter simply because it has no pressing business on hand. Although there is a mounting demand for legislative action to curb defense strikes, word has gone out from the White House to hold up legislation till the mediation board has had a fair trial (page 15).

had a fair trial (page 15).

Calendars in both houses are clear of major bills. The President's defense requirements have been filled. Senate and House are both far ahead of schedule on routine appropriation measures. Tax legislation and the St. Lawrence waterway project still await committee consideration.

• Spring Fever—Congressional steersmen expect no 1941 adjournment and feel a 10-day rest period at this point is justified.

Air Subsidy Coming Up

The Senate will reopen Apr. 14 by taking up the Treasury-Post Office supply bill. This carries an \$800,000 subsidy for an American Export Airlines trans-Atlantic air service in competition with Pan American Airways. That's controversial, and Administration strategists have been deferring a showdown while seeking votes for the proposition.

The House will return to departmental supply bills, with the Ways and Means Committee considering tax boosts. The committee must await

recommendations by Treasury experts. Public hearings probably won't get under way before mid-April or early May.

Defense Investigation

The Easter recess will put off the Senate's defense-contract investigation from Apr. 7 to Apr. 15. The inquiry is expected to unfold into a crusade for decentralization of industry but obviously will develop many other angles.

• Points to Be Covered: (1) Types and terms of contracts awarded in behalf of the United States; (2) methods by which such contracts are awarded and contractors selected; (3) utilization of facilities of small business concerns, through subcontracts or otherwise; (4) geographic distribution of contracts and location of plants and facilities; (5) effect of the defense program on labor and migration of labor; (6) performance of contracts and accountings required of contractors; (7) benefits accruing to contractors with respect to amortization for the purpose of taxation or otherwise; (8) practices of labor and management; (9) prices, fees, and charges which interfere with the program or unduly increase the cost.

Economic Warfare

Washington is preparing to crack down on leaks of important materials to the Axis powers. A long list of products is ready to be added any day to our export license list. Latin American products which Japan has been buying for Axis account are now tabulated and this country is likely soon to step in and buy all available stocks wherever the Latin American supply is the main one available

Even deliveries to unoccupied France are likely to be curtailed before they get much beyond the present experimental stage. Revelation in the last two weeks that 90,000 tons of oats, 25,000 tons of beef, and 3,000 tons of coffee went from unoccupied France to Germany between Dec. 15 and Jan. 15 have caused an about-face in Washington thinking.

Britain's Shadow Government

Britain has quietly set up what amounts to a shadow government at the Embassy in Washington. Represented are the British Supply Council in North America, Ministry of Shipping, British Air Mission, a Shipbuilding Mission, a Food Mission, and a growing staff from London's feverishly-

STEAM Heats America . .

Producing heat is only part of the heating job. Putting heat where you want it, when you want it is the big job—the job modern Steam Heating does Steam Heating does the Webster & Company, Camden, N. J.

HOWES BLOCK SAVES

Iowa Building Erected in 1900 Benefits by Extended Heating **Modernization Program**

USE WEBSTER HYLO CONTROL

Modernization Program Includes Installation of Radiator Traps and a Stoker

Clinton, Ia. — The 4-story Howes Block is securing better heating service at an average annual saving of \$212.75 as the result of a Heating Modernization Program.

In 1936, the heating of the Howes Block was modernized by installing a Webster Hylo Steam Variator System. Webster Thermostatic Radiator Traps and a new automatic stoker.



Howes Block, Clinton, la.

In five years before modernization, the cost of heating the Howes Block averaged \$1,080.29 per year.

After modernization, during the calendar years 1937-40, the average annual heating cost was only \$867.54, a saving of \$212.75 per year.

L. M. Howes, President of E. M. Howes Co., Inc., the building agent,

"Of course, the fuel saving is not due entirely to the Webster equip-ment, as we installed a new stoker at the same time. But we are very much pleased with the Webster installation.

"Formerly, we had to overheat rooms close to the boiler in order to get sufficient heat in rooms some dis-tance from the boiler. If we didn't get up much steam, the farthest offices were not sufficiently warm.

"Now all radiators in our building heat evenly and rapidly. We get adequate heat with a steam pressure of 1½ lbs., whereas we formerly had to maintain pressures up to 3 to 5 lbs.

"In a preliminary survey, Webster Engineers found that one floor had twice as much radiation as was needed."

George Harderson Company, of Clinton, Ia., acted as heating contrac-tors. There is a total of 6,000 square feet of installed direct radiation.

busy Ministry of Economic Warfare. Army, Navy and Air officials work daily with U.S. authorities on standardization of ordnance.

M.E.W. representatives (whose home cable address in London is "Whiskers") send almost daily reports to the State Department based on information culled from London's farflung censorship service. But, most significant, the embassy "government" has been given authority from home to act on its own responsibility in meeting any emergency that may arise.

London's Steel Needs

The British are doing so well in production of ordinary steel that this is actually an outstanding reason why they have suspended shipments from the U. S., leaving some 400,000 tons piled at docks and steel plants. Orders placed with mills have been canceled and procurement of this tonnage now will be arranged through orders to be placed by

this government.

The British policy of suspension and cancellation does not apply to alloysteel orders. Britain, like the United States, is pressing for all of this grade of steel it can get. This war is a war of special rather than tonnage steel. Britain also has suspended shipments of pig iron and iron and steel scrap, also piled up at docks, furnaces, and yards, but in much smaller volume than steel. Hereafter steel for the British will be chiefly in finished form to conserve cargo space and time, labor, and equipment in final processing. Already scrap and pig iron exports have declined markedly.

Knudsen's Bombers

The Detroit bomber program, originated by Knudsen last October, has finally reached the actual money stage -almost \$1,000,000,000. This covers the cost of a year's production, starting in the spring of 1942, of 3,600 bombers to be assembled in four governmentowned plants from parts built by auto firms. Included are 1,200 four-engine Consolidated B-24 bombers to be assembled in two plants by Consolidated and Douglas from parts manufactured by Ford; 1,200 North American two-engine B-25 bombers for which General Motors will build parts; and 1,200 Martin two-engine B-26 bombers for which Chrysler and Goodyear are to build

Some 400 firms will participate as subcontractors to the auto firms, which in turn will be acting as subcontractors to the airplane companies operating the government-owned plants.

· Obit.-This is the funeral of the C.I.O.-Reuther plan. The Office of Production Management didn't like its revolutionary features and finally got its nerve up to say so.

Insulin Indictment

Assistant Attorney General Thurman Arnold followed up his TNEC recommendation that the Miller-Tydings fairtrade act be repealed by charging three U.S. insulin-makers with using price maintenance contracts to enforce collusive price fixing on wholesalers and retailers. The insulin indictment, naming Eli Lilly, Squibb, and Sharpe & Dohme, was the first to be returned by a grand jury in the current antitrust investigation of the drug industry.

The grand jury that handed down the indictments has been disbanded but the Justice Department has promised similar action against other branches of the drug and cosmetic industries.

Wage-Hour Conflict

Mine operators are up in arms over Wage-Hour Division's insistence that all time between reaching the mine and leaving it must be included in computing the 40-hour week which is the maximum that can be worked without payment of overtime under the law. Prevailing practice in most operations is to count only the time spent at the "face" and operators took literally Wage-Hour's repeated past statements that long-standing practices would not be upset in applying the 40-hour limit. Appeal to Administrator Fleming got the operators only a respite until May. A court tilt appears in the offing.

More Taxes on Drinks

Industry squawks notwithstanding, hard and soft drinks are in for more taxes. The distilled spirits tax will be increased by \$1 or \$2 a gallon, beer by \$1 to \$4 a barrel, and wines accordingly. Soft drinks will pay a federal tax for the first time since 1934.

In answer to the argument that the "defense" tax increases last July (75¢ on spirits, \$1 on beer) depressed sales, tax men will point to New York's liquor price war and to "short" beers as evidence that the liquor industry can absorb higher taxes and still maintain sales and revenues. The 5% decline in beer sales in attributed largely to shorter drinks in taverns, in some cases shortened enough after the \$1 increase to absorb as much as another \$4.

Wheat Speedup

Thomas D. Campbell, Montana wheat grower who flew to London several weeks ago on a "mysterious" mission, will attempt to help the British Isles feed themselves. He has a process for growing wheat quickly. If, as Campbell believes, wheat can be harvested 10 to 12 weeks after planting, the effect of the German counter-blockade will obviously be lessened.

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The birth of a new grease in the Gulf Research Laboratory! Anti-friction bearings, now widely used in all types of machinery, require special long-life greases which must not separate, oxidize or harden in service. The new lines of Gulf Precision Greases and Gulf Anti-Friction Greases were specifically developed by Gulf technologists for maximum protection and scientific lubrication of ball and roller bearings.

Gulf's new ball and roller bearing greases—with greater stability and longer life—make a real contribution to defense production.

ANOTHER victory for lubrication research! In the photo above a Gulf scientist is calling attention to a curve showing the improved oxidation stability of a grease recently developed in the Gulf laboratory as compared to the stability curves for greases formerly considered the best obtainable.

This grease making equipment is just one among scores of experimental machines and devices used every day by Gulf's large corps of scientific men in their work of perfecting better oils and greases to meet industry's needs. Thus, Gulf is doing its part to help plant men reduce operating costs—save money on maintenance and power, improve production and make the machinery for which you paid real money last longer.

Ask a Gulf engineer to recommend proper lubricants and application methods for your machinery. These better oils and greases are available to you through more than 1100 Gulf warehouses in 30 states from Maine to New Mexico. Applied as the Gulf engineer recommends, they will help you improve both the quality and the quantity of production from your equipment and keep your maintenance and power costs at a minimum . . . Gulf Oil Corporation - Gulf Refining Company, Gulf Building, Pittsburgh, Pennsylvania.



ALSO A COMPLETE LINE OF FUEL AND FURNACE DILS



may be boited. This unit frame has integral with it a hinged cover or door which may be blank, or arranged for either dead-front manual or push-button operation of the device enclosed.

2nd...The Unitrol Section

is a steel enclosure which houses and supports a group of Unitrol Units. It is constructed of standardized interchangeable members to form the sides, top and back . . . with unique provisions for bus supports, wiring troughs, conduit or duct entrances, etc.

3rd . . . The Unitrol Control Center

consists of a grouping of Unitrol Sections fabricated into a complete sectionalized assembly and delivered ready for installation and use.

Unitrol may have the answer to the problem that has "stopped" you right now.

You are invited to bear in mind conditions that face your plant right now, as you read about Unitrol. Unitrol is a new method of housing and installing conventional starters.

The first step is the new Unitrol single unit mounting frame, into which any one of several sizes of conventional starters or control elements can be mounted. The second step is the new Unitrol Sectional frame into which several unit controls in their frames can be installed. The whole section thus forms a completely enclosed, compact and accessible structure which can be located anywhere, near a machine, against a wall, in a corner and so on. The third step is the Unitrol Control Center composed of more than one section; it is as complete as you want it, extensible, flexible, actually custom-built to your specific and individual needs.

There is no other method of housing and mounting a number of starters as compactly as Unitrol. There is no other method of custom-building a complete motor control center to your individual needs as easily and economically as Unitrol. There is no method as flexible or build plant extensions. It may prove to be just the type of control organization in your plant needed to break a "bottleneck." It grows in size or it contracts in size to keep abreast of your needs. The control elements housed in it may be changed at will, and easily. Its installation requires no special wall or floor preparation. Literally, it can be installed anywhere. Its cost is less than that of even an unsatisfactory substitute.

Unitrol's advantages are so great, its ability to save time, money and space as well as to solve building problems is so extensive that it requires a full-size 36-page booklet to tell them all. This booklet "Unitrol ... the Next Step Forward in Motor Control" is sent free and without obligation to business executives. Dictate a memo to your secretary now—to send for a copy of this interesting book. CUTLER-HAMMER, Inc., Pioneer Electrical Manufacturers, 1275 St. Paul Ave., Milwaukee, Wisconsin.



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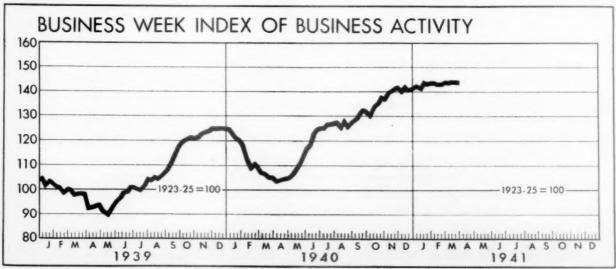
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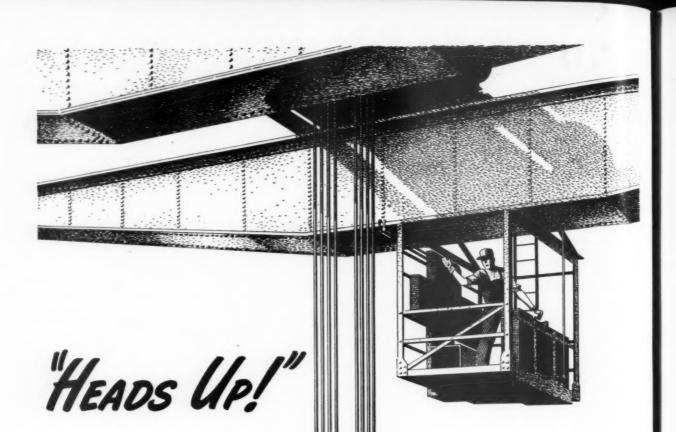
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FIGURES OF THE WEEK

THE INDEX	§ Latest Week *144.4	Preceding Week †144.7	Month Ago 144.4	6 Months Ago 132.9	Ago 105.8
PRODUCTION (% of sensite)	99.2	99.8	97.5	92.6	63.7
Steel Ingot Operations (% of capacity)	124,165	+123,805	126,550	95,990	61.7
Automobile Production. Engineering Const. Awards (Eng. News-Rec. 4-week daily av. in thousands)	\$17,394	\$18,851	\$20,256	\$16,078	\$8,182
Electric Power Output (million kilowatt-hours)	2,802	2,809	2,826	2,670	2,422
Crude Oil (daily average, 1,000 bbls.)	3,747	3,681	3,632	3,800	3,841
Bituminous Coal (daily average 1,000 tons)	1,900	1,858	1,722	1,550	1,335
TRADE					
Miscellaneous and L.C.L. Carloadings (daily average, 1,000 cars)	81	81	76	81	68
All Other Carloadings (daily average, 1,000 cars)	47	45	43	54	36
Check Payments (outside N. Y. City, millions)	\$5,214	\$5,816	\$4,631	\$4,292	\$4,117
Money in Circulation (Wednesday series, millions)	\$8,842	\$8,826	\$8,725	\$8,090	\$7,471
Department Store Sales (change from same week of preceding year)	-2%	+7%	+7%	+10%	+12%
Business Failures (Dun & Bradstreet, number)	302	255	305	258	287
PRICES (Average for the week)					
Business Week-Annalist Cyclical Commodity Index	86,95	86.58	84.87	76.24	71.37
Spot Commodity Index (Moody's, Dec. 31, 1931 = 100)	184.2	182.8	175.7	160.0	155.5
Industrial Raw Materials (U. S. Bureau of Labor Statistics, Aug., 1939 = 100).	134.9	133.3	126.3	114.3	112.9
Domestic Farm Products (U. S. Bureau of Labor Statistics, Aug., 1939 = 100).	131.5	130.8	127.1	117.0	116.0
Iron and Steel Composite (Steel, ton)	\$38.29	\$38.29	\$38.23	\$37.98	\$36.81
Scrap Steel Composite (Iron Age, ton)	\$20.25	\$20.33	\$20.17	\$20.54	\$16.08
Copper (electrolytic, Connecticut Valley, lb.)	12.050¢	12.063¢	12.000¢	12.000¢	11.188¢
Wheat (No. 2, hard winter, Kansas City, bu.)	\$0.87	\$0.85	\$0.80	\$0.77	\$1.03
Sugar (raw, delivered New York, lb.)	3.40¢	3.40¢	3.14¢	2.75€	2.79€
Cotton (middling, ten designated markets, lb.)	10.99€	10.64¢	10.26e	9.45¢	10.50€
Rubber (ribbed smoked sheets, New York, lb.)	22.63¢	22.49¢	20.89€	19.57€	18.32€
FINANCE					
90 Stocks, Price Index (Standard & Poor's Corp.)	79.2	79.0	78.2	85.1	97.3
Medium-Grade Corporate Bond Yield (30 Baa issues, Moody's)	4.34%	4.36%	4.42%	4.61%	4.78%
U. S. Bond Yield (average of all issues due or callable after twelve years)	2.00%	1.99%	2.06%	2.15%	2.22%
U. S. Treasury 3-to-5 year Note Yield.	0.50%	0.49%	0.48%	0.45%	0.41%
Call Loans Renewal Rate, N. Y. Stock Exchange (daily average)	1.00%	1.00%	1.00%	1.00%	1.00%
Prime Commercial Paper, 4-to-6-months, N. Y. City (prevailing rate)	1-1%	1-1%	1-8%	1-8%	1-3%
BANKING (Millions of dollars)					
Demand Deposits Adjusted, reporting member banks	23,259	23,186	23,431	21,080	19,276
Total Loans and Investments, reporting member banks	26,918	26,843	26,450	24,166	23,329
Commercial and Agricultural Loans, reporting member banks	5,420	5,414	5,227	4,575	4,383
Securities Loans, reporting member banks	995	926	933	877	1,087
U. S. Gov't and Gov't Guaranteed Obligations Held, reporting member banks.	13,334	13,343	13,100	11,779	11,209
Other Securities Held, reporting member banks	3,786	3,786	3,855	3,698	3,517
Excess Reserves, all member banks (Wednesday series)	6,010	6,110	6,540	6,645	5,679
Total Federal Reserve Credit Outstanding (Wednesday series)	2,221	2,259	2,223	2,472	2,510
 Preliminary, week ended March 29th. Revised. 	§ Date	or "Latest V	Veek" on e	ach series or	n request.





Give 'em room—they're moving! Cranemen swinging their giant loads of tank frames and turbine castings... operators of massive presses thumping out parts for guns and motors... workmen lit by the flare of electric welding—moving to the quick beat of the punch press, to the rumble of the conveyor, to the whine of the whirling lathe. Things are rolling today in America's factories.

Action—that's what we're getting—from the world's best workmen and the world's best production machinery. For the American workman of today is a superman compared with his counterpart

of only a few decades ago. Industry has given him as helpers mechanical strong men in the form of power tools and machines. These multiply his effective strength; they help him to produce more—better—faster.

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Men and machines—they've made the American standard of living the highest in the world. Now, working together as never before, they're making the things we need to defend that American standard.

Heads up! Industry is on its way meeting the urgent requirements of the immediate present.

Today, as for the past 60 years, General Electric scientists, engineers, and workmen are finding new ways to apply electricity to multiply the strength of the American workman's muscles—to increase his efficiency—to make America secure. General Electric Company, Schenectady, N. Y.

GENERAL E ELECTRIC

THE OUTLOOK

Expansion-Despite Strikes

Urgency of aid to Britain may be counted on as factor that will prevent any long interruption of production. February employment at new high. Plant enlargement continues.

This week's coal stoppage and the strike against Ford do not change the business outlook materially. The tieups impede the smooth flow of production, they tend to increase the operating costs of industry and so cut down profits, but they do not—they cannot for long—change the tidal wave of industrial expansion that started when the United States embarked on an all-out defense program last spring, following the capitulation of France.

Long Shutdown Unlikely

It is conceivable, of course, that blockage of production in several key industries all at once might produce what is tantamount to an effective shutdown of American industry. But it hardly seems likely that such a development could last very long. Under the pressure of public opinion, management, labor, or both, would have to give. The urgency of aid to Britain is too compelling to permit long-drawnout disputes to stop vital assembly lines.

This is not mere wish-thinking. Any grave industrial conflict tends to produce its own remedy. An outbreak of strikes, sooner or later, creates a crisis, and when the crisis passes, the height of the fever also passes. In 1937, for instance, public opinion swung away from the workers, after the General Motors' sitdown. This, unquestionably, was a potent factor in the management victory in the "Little Steel" strike. The unions—especially the C.I.O.—were in disfavor.

Labor's Reasoning

Two types of labor issues are involved in current and recent controversies. In coal and U. S. Steel, for instance, the disputes centered on wages and hours. In Ford and Bethlehem, union recognition was at issue. Labor leaders contend that unrest is bound to persist in any industry as long as it is partly unionized and partly non-unionized. Therefore, they argue that labor stabilization in automobiles and steel is impossible so long as Ford and the "Little Steel" companies have open shop.

The labor reasoning runs like this: Questions over wages and hours can be negotiated and mediated, but union recognition is so fundamental that it cannot be compromised. It is in such situations that the National Defense Mediation Board has its work cut out for it. And until some formula is established for dealing with union recognition, labor troubles will be bound to interfere with production. Only a crisis is likely to bring forth a formula of this kind—possibly "urged" by the Administration.

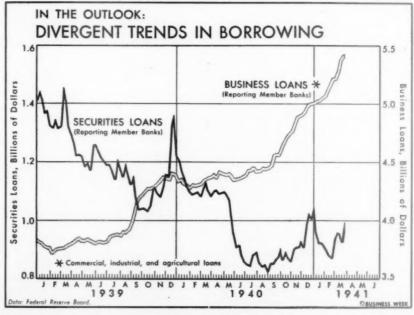
Meanwhile, the production statistics do not show any marked falling off. The Business Week Index this week held close to its year's high, partly because coal loadings were unusually heavy—as bituminous users stored up reserves against a strike. Next week, however, coal loadings will fall off, and the Business Week and other weekly indexes should register a sharp drop.

Plant expansion continues. The public utilities, in expectation of mounting

demands from industry under the defense load and in anticipation of higher building and equipment costs later on, have embarked on large programs. This year's construction program of the Bell Telephone System may reach as high as \$500,000,000 in contrast to \$381,-000,000 last year. One has to go back to 1930, when Bell construction expenditures reached \$585,000,000, to find a bigger plant-expansion year for the system. The United Gas Improvement System's capital outlays will run to \$29,900,000, a gain of nearly 45% over last year. Commonwealth Edison is also expanding capacity, in a threeyear program involving \$120,000,000.

Employment at High Level

At the Commonwealth Edison's annual meeting, C. Y. Freeman, chairman, pointed out that in the event of a decline in business activity, the company would use its highly efficient, new capacity as far as possible, and hold high-cost facilities in reserve. This is in line with industrial practice nowadays: to enlarge plant, recognizing that when the war effort is over the newer facilities will cut down the costs of operation.



The rise in business loans continues. Except for the minor dip last spring, banks have been expanding credit steadily for two years. Business men, once the short-lived 1937–38 depression ended, re-entered the money markets for funds—largely to build up inventories. The outbreak of the war in Europe accelerated the movement in

1939, and then last summer another burst of borrowing took place, concomitant with the speedup in this country's defense effort. Securities loans, however, have been in an intermittent, but consistent, downtrend—another indication of the low state of speculative confidence in America (Chart, BW—Mar.29'41,p13).

As further evidence of expanding business activity, employment in the non-agricultural industries reached the highest February level in history—36,584,000 workers. Seasonally, the working force should increase from now until fall; thus it is probable that the September, 1929, high of 37,470,000 workers will be surpassed.

February gains in the key defense industries were as follows:

Industry	w	No. of	Gain
Aircraft		150,900	10,000
Shipbuilding		138,700	7,900
Machine tools		84,900	3,900
Engines		74,700	3,500
Machine-tool accessories		45,000	2,900
Firearms, ammunition, expl			
sives		33,200	2,100

Other manufacturing industries, affected by war orders, which reported increases were: Automobiles (14,100); electrical machinery (10,100); steel (6,900); foundries and machine shops (6,700); stamped and enameled ware (3,600); brass, bronze, and copper products (3,000); and chemicals (1,800).

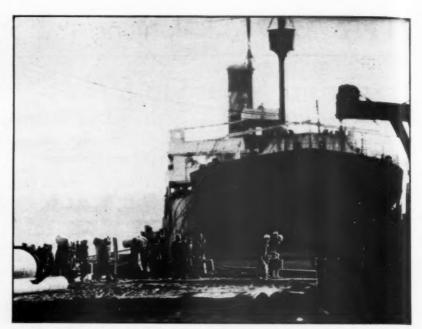
NEW DEFENSE BUSINESS

There have been increasing signs that the defense program is getting out of the tooling-up and construction stage and entering the actual production stage. To a certain extent, that change is reflected in defense contracts. Last week, for example, major contracts awarded included \$205,000,000 for 137 standardized cargo ships under the 200-vessel emergency ship-building program (BW-Feb. 22'41,p14). This brings the total of "pointed boxes" under contract to 162.

Other major contracts included \$5,835,000 to the Cathis Yacht Building Co., Camden, N. J., for nine naval auxiliary vessels; \$4,565,000 to Fairbanks, Morse for construction of propelling machinery to equip 11 submarine chasers; \$2,100,000 to Scovill Manufacturing, Waterbury, Conn., for artillery matériel.

Meanwhile, of course, there have been a number of major construction contracts. Chase Brass & Copper has been awarded \$16,000,000 to expand its Cleveland plant to produce ammunition brass and cartridge cases; Fleetwings, Inc., got \$2,483,919 to build a plant at Bristol, Pa., for the manufacture of aircraft parts.

In addition, contracts totaling \$2,940,000 have been awarded for construction of a naval training and torpedo station at Newport, R. I.; and \$1,408,535 has been awarded for construction of Army air facilities at Meridian, Miss.



Typical of the seizure of 64 German, Italian, and Danish ships by the U.S. last week was that of the Nazi tanker, Pauline Friederich, at Boston.

Million Tons Now

Ship seizure's importance can be evaluated only in light of Hitler's strategy and output of American and British yards.

Excitement ran high last week when United States Customs officials suddenly boarded 64 German, Italian, and Danish ships which had been tied up in American ports since their countries entered the war. Latin American countries took the cue. Peru stopped the scuttling of two German freighters, sent a naval vessel after two others that had fled port in the night. Ecuador acted but failed to save the lone German refugee freighter that had run for shelter in 1939. Mexico grabbed 10 ships to prevent sabotage.

• Real Center of War-In the weeks just ahead, the real center of this war is going to be the North Atlantic (BW-Mar.29'41,p17). Here Hitler hopes, with his growing brood of midget submarines, to cut dangerously into the flow of munitions and food to the beleaguered British Isles. If at the same time he can batter Britain's ports and munitions plants from the air, he believes he can bring London to its knees.

Washington understands Hitler's plan and knows that Britain's most serious problem **this** year is going to be the maintenance of the "Bridge of Ships."

• Important Steps—Three moves have already been made to help Britain meet this crisis: (1) 50 destroyers have been

traded for naval bases in this hemisphere; (2) Britain has been allowed to order 60 cargo ships in this country despite the fact that our shipyards can barely keep up with domestic business; (3) Washington has ordered 200 massproduced "pointed boxes" to meet the serious shortage of tonnage which inevitably will face this country and Britain by the end of this year.

The seizing of the foreign vessels this week is merely the latest move in the President's bold scheme to aid Britain. The seized vessels can be put on neutral runs (perhaps between North and South America) to replace American coastal ships which can be lent to the British. Shipping authorities declare that 140 or more coastal vessels are already earmarked for transfer to Britain.

• What Has Been Gained—How important is the tonnage seized? Here is a Maritime Commission listing of the idle boats in both United States and other Western Hemisphere ports, as of March 22, 1941, with the tonnage range:

		Gross	Size Range
	No.	Tonnage	(Tons)
Danish	36	124,853	1,369- 8,278
German	2	8,999	4,354- 4,645
Italian	26	140,450	3,027- 8,059
OTHER WEST	ERN	HEMISPHE	RE PORTS
Danish	18	55,621	1,392- 9,119
German	50	277,625	1,120-16,662
Italian	61	375,089	316-23,861
TOTAL			
Danish	54	180,474	1,369- 9,119
German	52	286,624	1,120-16,662
Italian	87	515,539	316-23,861

To these can be added four Danish ships seized in the Philippines and, be-

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fore the matter is closed, possibly 18 French vessels now tied up in U.S. ports, including the Normandie, which would be used only as a troop carrier. · Available Now-Britain and her Allies have lost 5,300,000 tons of merchant shipping since the war started. Replacements this year can amount to no more than 1,000,000 tons in Britain, possibly 1,100,000 in the United States. That is why the 1,000,000 tons of vessels seized this week are so important now. They are small; some are very slow; few of them have refrigerated cargo space. But in sheer tonnage they equal nearly a year's output either in Britain or America. And they are available now

This is the real significance of Washington's move this week.

Balancing the Strike Accounts

Behind the news of fresh losses in defense production. notably at River Rouge, there's evidence of gains for peace as mediation shows results, Congress threatens action.

Along with the spectacular news that the long-smouldering Ford labor pot had finally boiled over (page 16) and that the tough Allis-Chalmers strike had reached a new impasse after an abortive back-to-work movement, the defense strike situation has produced some under-current evidence of improvement during the past week. Labor has showed signs of yielding to the pres-

sure of public opinion, marshalled behind the program of the National Defense Mediation Board, and to the threat of a congressional crackdown. Its leaders knew that the Vinson bill empowering the government to take over plants in which there is an "existing or threatened" failure of production on defense orders could still get the nod from the White House, though the President was reported "optimistic" on the efficacy of present mediation machinery. • Bigger but Fewer-At mid-week there were fewer defense strikes, though more dramatic ones. Offsetting the bitter news from Ford and Allis-Chalmers

were these encouraging developments:
(1) The National Defense Mediation Board was able to report almost immediate resumption of work in three of the first four strikes referred to it.

(2) United States Conciliator James R. Steelman was able to express the hope that work would be resumed in the soft-coal fields "within 48 hours" as miners and operators continued their negotiations beyond the April 1 deadline on a Presidential request for early conclusion of some settlement.

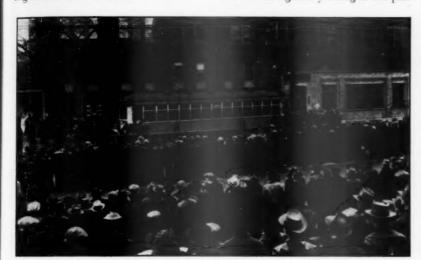
(3) The threat that the Steel Workers Organizing Committee would strike United States Steel Corp. was temporarily lifted when agreement was reached to continue negotiations for another week beyond Apr. 1 deadlinean agreement inspiring hope the showdown would be completely averted.

(4) S.W.O.C. strikes at the Bethlehem and Johnstown plants of Bethle-hem Steel Corp., called as a protest against scheduled plant elections held under the Employee Representation Plan, were ended after work stoppages of only a few days when the company agreed to negotiate differences with S.W.O.C. (Bethlehem had previously been ordered to disestablish its E.R.P. by the National Labor Relations Board.)

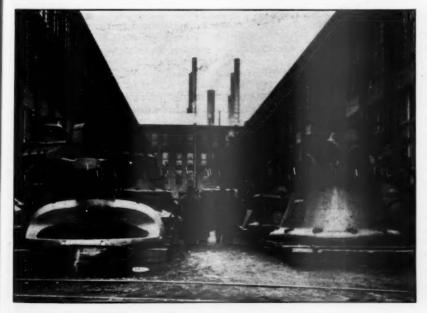
(5) The Conciliation Service was able to report continued progress in its mediation work-notably in ending strikes at the J. G. Brill Co. plant in Philadelphia and at the Breeze Corp. in Newark where defense production had been held up.

• Eyes on NDMB-Of these favorable developments probably the results credited to the new National Mediation Board (BW-Mar.29'41,p15) in the

handling of its first cases were of the most immediate popular interest-and, possibly, of the greatest long-range significance. Certainly they were productive of the most optimistic head-



Before the final showdown in the Allis-Chalmers strike this week, a back-to-work movement got under way. Strikers massed at the main entrance (above) to boo workers returning to the long-idle plant (below). Within two days, booing gave way to such violence that Wisconsin's governor shut the plant down, wired Roosevelt: "A condition of riot beyond the control of state, county and local peace officers has developed."



Business Week • April 5, 1941

Ford and the Union at Last Come to Grips

While Federal Conciliator James Dewey this week was saying, "I'm sure we can straighten this trouble out in quick order," Ford cars, bought at employee discounts and owned by strikers, were lining up bumper-to-bumper, 15 deep before the approaches to the 14 gates of the two-square-mile River Rouge plant of the Ford Motor Co. Wednesday morning the improvised barricades were turning back thousands of workers and the giant mechanism of Ford production was slowing down. The long anticipated Ford-C.I.O. showdown was at hand. To keep that showdown from becoming a pitched battle, if possible, and to clear the air for negotiations, the Rouge works were closed Wednesday night at the request of Gov. Van Wagoner and barricade pickets were withdrawn.

The current explosion has a long fuse which was set afire back in 1936 when U.A.W. joined the C.I.O. and set out to unionize the entire motor industry. Studebaker, Nash, Packard, Reo, and Willys soon came to terms with the union. Then came the battles in Flint, Saginaw, and Lansing with General Motors and the showdown with Chrysler. By 1938, except for Ford, auto manufacturing was a

unionized industry.

Even that long ago, it was clear to U.A.W. leaders that Ford was not to be taken by storm. What the situation required, and what it got, was a long, carefully prepared campaign which utilized every organizing device (BW-Jan.11'41,p39).

Biggest guns in U.A.W.'s arsenal

were two court decisions. The first one opened the streets of Dearborn to union organizers (BW-Jun.1'40, p16), an achievement which set the stage for concentrated recruiting. Second was the hard-fought U. S Supreme Court decision holding Ford in violation of the Wagner Act for discriminating against U.A.W. members. That decision gave the union a talking point which it publicized to the hilt (BW-Feb.15'41, p14). It also effected the reinstatement at Rouge of 23 active unionists who returned to their jobs carrying the banner for C.I.O.

From February on, the union drive really made time. In little more than a month, U.A.W. was able to call sporadic sit-downs in scattered departments-testing its power, flexing its muscles. Last week hearings for an NLRB election opened in Detroit. Then came this week's alleged firing of union men-and the strike

was on.

The union presented five demands: (1) Immediate reinstatement of all workers allegedly discharged because of union affiliation; (2) a wage increase of 10¢ an hour; (3) a seniority system to govern layoffs and rehirings; (4) a shop steward system to handle grievances as they arise; and (5) abolition of the so-called espionage system and of the service department. If the strike is really effective, watch demand No. 4. If U.A.W. feels strong enough, it is that demand which in the course of negotiations can be expanded into a demand for full-fledged recognition.

imminent. International Harvester was pushed on the board's docket because C.I.O.'s strike there was being broken and any face-saving device would be an excuse for the union to call it off. But in two cases the timing was bad: The Universal Cyclops dispute was settled before the board could do anything to claim credit for it, and the Cornell-Dubilier agreement developed an unexpected hitch which postponed a truce.

However, the headlines reporting progress in strike settlements gave the board the flying start it needed and set the stage for certification of a couple of cases in which it may be possible to make headlines out of the fact that NDMB can be tough. The purpose of getting tough will be to discourage de-mands for certification, teach disputants that it will be better-mainly for the unions as initiating parties-to take what they can get on the way up. • How Board Works-Procedure to be followed by NDMB can be charted from its first cases. Under the President's executive order of Mar. 19, at least three members of the board, one each representing management, labor, and the public, must be assigned to each case certified.

Preliminary hearings will be held in Washington. Subsequent hearings may be held at an affected plant, especially if the union insists on representation by a large committee and the company wants its managing officials present. The hearings in Washington are held in the board's headquarters at the Social Security Building. They are closed to the press and public but may be thrown open in particular cases when the board deems it advisable to make public its findings of fact and recommendations "in the interests of industrial peace." • Witnesses and Records-The Board

probably has the right to subpoena witnesses and records of both companies and unions as the President's order authorizes it, by virtue of the authority vested in him "by the Constitution and the statutes" to "investigate issues be tween employers and employees. . . . conduct hearings, take testimony," etc. Actually, however, subpoena of witnesses and of records probably will be resorted to only rarely, and as a last step preceding public recommendations by the board addressed to the force of public opinion. Cases calling for public recommendations are expected to be in a very small minority.

• Three Mediation Jobs-The three mediation jobs which present an immediate challenge to the board's peace-

making powers are:

Cornell-Dubilier Electric Corp. in South Plainfield, N. J., where some 2,000 employees under the leadership of A.F.L.'s International Brotherhood of Electrical Workers have been out since Mar. 9. The strike was called after last year's contract had expired and attempts to agree on a new one had been unsuccessful. Involved in the dispute are wages and exclusive bar-gaining privileges. The company has orders for condensers for the Navy.

Vanadium Corp. of America in Bridgeville, Pa., struck by a local of C.I.O.'s Steel Workers Organizing Committee against the orders of the parent union which condemned the walkout as "wildcat and unauthorized." Out a month-and-a-half-and back to work now with the issue still to be resolved by NDMB-the strikers were demanding replacement of non-union company guards by union men.

International Harvester's McCormick Works in Chicago, focus of a strike by C.I.O.'s Farm Equipment Workers which spread to three other Harvester plants. After a month's shutdown, the strike was being undermined by a police-protected back-to-work movement when, to the union's relief, the situation appeared on NDMB's docket.

The truces, however tenuous, which the board effected in the Vanadium and International Harvester strikes will be a big help to that prestige which must be NDMB's chief asset in fulfilling its program. But its job is still ahead of it. Armistices were achieved on the board's promise to mediate after a return to work and it can expect to be persuasive in getting strikes held off pending mediation only to the extent

lines, though these will bear analysis.

that it can persuade management and labor that its procedures and proposals

are equitable and workable.

• Hand-Picked Cases—The first four cases certified to the National Defense Mediation Board (by the U.S. Conciliation Service, on whose initiative it must wait) were carefully selected. In three of them-Universal Cyclops, Vanadium, and Cornell-Dubilier-previous intervention by the Conciliation Service had brought negotiations to a point where settlements were considered

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Business Week • April 5, 1941

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Final report warning of threats to free enterprise and free government carries little wallop in its recommendations.

Dramatic in its death throes, the Temporary National Economic Committee delivered itself of a final report this week warning that concentration of economic power is undermining the foundations of both free enterprise and free government. In the light of its portentous fears that democracy may vanquish the aggressors only to find itself under the domination of economic authority far more concentrated and influential than that which existed prior to the war, the committee's recommendations have proved to be surprisingly moderate. And most or all of its recommendations will bear fruit, if at all, after the war.

• Pet Plans Sidetracked—As anticipated (BW—Mar.22'41,p22), the committee's collective recommendations do not support drastic proposals advocated by individual members. Four of the 12-member congressional-executive group dissented from Chairman O'Mahoney's pet panacea for the evils of corporate monopoly—federal charters for concerns engaged in interstate business.

The proposals of Commissioner Sumner T. Pike of SEC for "limited" federal supervision of life insurance companies were too much for the other TNEC members to swallow. Instead, the committee recommends federal legislation prohibiting companies from using the mails and other interstate channels to sell insurance in states where they have not been licensed and also recommends legislation forbidding officers and directors from using their positions for improper personal gain.

• Inquiry Proposed—Thorough investigation of fire, casualty, and other forms of insurance which TNEC's investigation did not cover is proposed. The committee observed that a fundamental change in the conduct of industrial insurance would have to take place or its elimination might be necessary.

Although the committee's general dissertation is impressive, the report loses its punch in the comparative triviality of its specific recommendations. Isador Lubin, passionate statistician of the Labor Department and Leon Henderson, the man of all work in SEC and other federal precincts, observe tartly that the committee's report emphasizes avoidance of monopoly more than broader and more fundamental questions. They lay the stick on TNEC's backside with a heavy hand, asserting that its report would not have prevented the depression and that its program

would not be adequate to meet the problems of tomorrow.

• What Will Happen?—Addressing itself to the future, TNEC says, "There is scarcely a person in Washington engaged in the great national defense effort who does not realize that preparation must be made for the day when this defense effort is no longer necessary." The committee asks itself, "What will happen when production of bombs and weapons is no longer needed and the hour of industrial demobilization comes?"

TNEC's answer is that if the government is not to assume the task we must find the way to foster and encourage private enterprise. To that end, private enterprise must be protected from destruction by concentrated group activity and such activity must be stopped if enterprise is to be kept free from government control. "The object of government should be to foster and stimulate free enterprise rather than to supersede it," the committee states.

• Subversive Tendencies—TNEC dares to note subversive tendencies in government policies. The Guffey Coal Act is cited as having set up "an order which is not without its resemblance to the Fascist order." The Tennessee Valley Authority is darned if not damned by the comment that it is not without some aspects of socialism.

The committee holds that an equitable tax system for stimulating investment in new fields of business activity is preferable to continued government spending. Recommendations pointed

specifically to arresting the growth of monopoly include the following—all of which were advanced by spokesmen for various government agencies at TNEC's closing public sessions and which have already been fulsomely reviewed (BW—Mar.22'41,p22).

 Granting authority to the Federal Trade Commission to prevent merging of competing corporations.

(2) Prohibiting acquisition of stock in or holding company control of competing companies, with certain exceptions.

(3) Federal registration of national trade associations.

(4) Compulsory licensing of patents, with determination of reasonable royalties in judicial or administrative hands.

(5) Prohibition against filing applications for patents in foreign countries.

(6) Repeal of the Miller Tydings Act validating resale price maintenance contracts entered into under state fair-trade laws.

(7) Establishment of a committee on federal-state relationships to seek elimination of interstate trade barriers.

(8) More drastic penalties for violation of the antitrust laws, with authority to the Federal Trade Commission to serve as master in chancery in antitrust cases and expansion of the antitrust activities of both the Federal Trade Commission and Department of Justice.

(9) Stimulation of means to distribute the gains from technological advance.

(10) Encouragement to decentralization of industry and centralization of government purchasing in one agency as far as possible.

(11) Allocation of defense spending in such a manner as to break down monopoly control of basic products and foster competition effective in the post-war period.



MACHINE TOOL AUCTION

With American industry in crying need of machine tools to speed production of defense orders, some 300 buyers from all over the country flooded to Springfield, Ohio, recently in a frenzied scramble to purchase approximately 200 pieces of machinery when the plant and equipment of the old Miller Improved Gas Engine Co. were sold at auction. Unrestrained by the Defense Commission order

establishing ceiling prices for the regular second-hand machine tool trade at levels ranging from 50% to 95% of the full price on new tools (BW—Feb.22'41,pl4), bidders at the auction boosted prices for lathes, grinders, drills, and planers and other tools 15 to 20 years old to new highs. Two turret lathes, which cost \$2,300 each when they were new, sold for \$5,000 and \$5,200, and a 20-year-old horizontal boring machine originally costing about \$8,000 went for \$24,000.



AC MACHINE GUN

Executives of the AC Spark Plug Division of General Motors celebrated last week when the first complete machine gun for the Army rolled off their production line 10 months ahead of schedule. The gun is part of a \$61,000,000 order awarded to AC and three other G. M. divisions last September. AC officials say it's now a matter of mass production.

Farm Aid-1941

General overhauling of program appears most unlikely. Increase in loans rather than in parity payments favored.

Prospects for farm aid seemed this week to have shaken down pretty well into final form, and it appears more than ever certain that there will be no general overhauling of the farm program at this session of Congress (BW-Mar. 8'41,p26). The agricultural committees of both the House and the Senate are on record as favoring higher loans to farmers to carry surpluses, and both have agreed to Secretary of Agriculture Wickard's request for more stringent penalties on farmers who sell in excess of their marketing quotas.

The certificate plan for allotting the domestic market looks as if it is going to be a holdover. Demands for additional parity payments (raising the appropriation of \$212,000,000 to perhaps as much as \$450,000,000) meet opposition from those who would keep the budget in hand in order to finance the defense effort. The modified 100% parity payment idea advocated by Oscar Johnston, president of the National Cotton Council of America, is another budget upsetter, perhaps to the tune

of \$300,000,000 a year. Mr. Johnston's plan rests on the assumption that the farmer no longer should be denied the full parity price (1910–14 ratio of price of the crops he sells to the goods he buys). Mr. Johnston advanced the following formula to attain the goal:

To the price at which the farmer sells his bales of cotton or bushels of wheat, add the amount he gets from the present \$212,000,000 annual appropriation for partial parity payments. Then, from an additional appropriation of maybe \$300,000,000, he should get enough extra to bring him up to 100% parity. If the fund appropriated happened to be not quite sufficient for 100% payments on the major crops—cotton, wheat, corn, tobacco, and rice—it should be prorated so as to approximate 100% parity for all as nearly as possible.

• Out of the Window-All the new or old ideas for revamping the farm program appear, however, to be compromised out of the window, at least for the time being. Hence it's mostly a matter of how much the loan for carrying surplus crops is to be raised. The House committee reported a bill asking for 75% of parity as the loan value as opposed to the Senate's 85% to 100%. The House figure reportedly is all the Administration will stand for, and there probably won't be much of a fight.

In return for agreeing to a 75% loan rate, Secretary Wickard presumably will get permission to cut the wheat mar-

keting quota (if farmers give it a 063% affirmative at the forthcoming ballot) to produce of perhaps 50,000,000 acres.

• Cotton Restriction—He may also get a further restriction on cotton to pull it more nearly into line with the Department's estimate that the current season's domestic consumption will run 9,250,000 bales, an all-time high.

Underlying philosophy behind the in clination to raise loan rates rather than parity payments is simple. The parity payments have to be appropriated by Congress and are a direct annual dram on the Treasury. Loans, on the other hand, may be raised by borrowing against the stored commodities, and they don't become a Treasury outgo unless and until losses are taken on the crops impounded. Deferment of the day of reckoning is unusually expedient in these days of vast appropriations for defense and aid to Britain.

Railroad Research

Rolling Stock Patents Corp. results from Chrysler's idea of applying auto technique to obtain better train rides.

In his years as a boomer railroad mechanic, Walter P. Chrysler's ambition was to try every shop on the Union Pacific. Before he quite made the rounds, he moved into automobile manufacturing. Also, he became a director of the New York Central.

Three or four years ago, Mr. Chrysler convinced the Central's management that what the automobile industry has learned about making a high-speed vehicle ride smoothly on roadbeds far rougher than well-groomed railroad tracks might well be applied to railroad rolling stock. But he knew it would take a program of technical research.

• Laboratory Project—Result was a research project undertaken in the Chrysler laboratories. N. Y. C. and Chrysler Corp. spent around \$300,000, on their program, produced nothing concrete enough to make a better train. But the research uncovered a dozen different leads that looked as though they might get somewhere.

Last week the Pullman Co.'s annual report disclosed that this preliminary work was promising enough to induce two other companies to pitch their money and know-how into the project. Pullman and the Pennsylvania Railroad have now joined the Central and Chrysler. Together, they have incorporated Railroad Rolling Stock Patents Corp. to expand and carry on the research.

 General Purpose: To increase speedcapacity, safety, and comfort of passenger train cars. Points under scrutiny: Weight distribution, couplings, trucks. "Unforeseen events . . . need not change and shape the course of man's affairs"



INVITATION TO TROUBLE

When you have an automobile accident you are likely to run into a swarm of difficulties as troublesome as a hornet's nest.

The difficulties are more than simply a crushed fender. More often, the accident is serious enough to require that a bond be furnished...the car released from attachment...witnesses sought out and interviewed...a scale map made of the accident, a photograph taken of the scene.

If the case goes to court, there are attorney's fees, court costs and medical examinations to be paid.

Were you to undertake this yourself you would be obliged to give up time and money worth many times the cost of insurance. And you would still have to meet, out of your own pocket, any financial responsibility for damage or injury

How much safer you are to travel under the broad protection of The Maryland! If an accident should befall you anywhere in the United States or Canada, The Maryland shoulders your burden.

A Maryland Service Card in your wallet serves as a guardian of your peace of mind...a reminder that you have 10,000 friends—Maryland representatives who can be reached quickly through any telephone or telegraph office...a protection against a veritable swarm of annoyances. Maryland Casualty Company, Baltimore.

THE MARYLAND

The Maryland writes more than 60 forms of Casualty Insurance and Surety Bonds. Over 10,000 Maryland Casualty agents and brokers can help you obtain protection against unforeseen events in husiness, industry and the home.

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ONLY F-M GIVES YOU ALL THESE THINGS

V Local Engineering Service

Trained factory engineers near you who understand and can fit air conditioning to your local weather conditions.

✓ 111 Years' Engineering Experience

A world-wide reputation in designing and manufacturing precision equipment for over a century.

M A Reputation for Quality Only

Quality construction has brought enthusiastic users in every state in the Union.

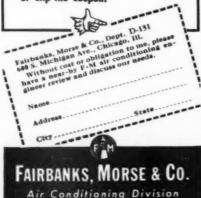
M Local Service

Experienced factory supervised mechanics near you for installation and service.

Check with Our Nearest Branch

515 Whitehall Street, Atlanta, Ga.
178 Atlantic Avenue, Boston, Mass,
600 S. Michigan Avenue, Chicago, Ill.
49 Central Avenue, Cincinnati, Ohio
2810 Superior Avenue, Cleveland, Ohio
Corbin & Market Streets, Dallas, Texas
13th & Liberty Streets, Kansas City, Mo.
2401 Santa Fe Avenue, Los Angeles, Calif.
1000 St. Charles St., New Orleans, La.
80 Broad Street, New York, N. Y.
902 Harney Street, Omaha, Nebr.
35 Harrison Street, San Francisco, Calif.
217 S. Eighth Street, St. Louis, Mo.
220-26 E. Fifth Street, St. Paul, Minn.
1226-28 First Ave., South, Seattle, Wash,
1427 Eye Street, N. W., Washington, D. C.

or Clip the Coupon!



War Story

Flow of foreign trade has shifted on the tide of battle. Noteworthy: Japan's loss and Latin America's gain.

For United States exporters as a whole 1940 was a big year, the best since booming 1929. Sales topped \$4,000,000, and many a manufacturer was turning down all inquiries from outside this country—unless they happened to come from Britain or the Empire.

• War Effects—But the real story behind 1940, as far as foreign traders are concerned, is a war story—of losing five of our 20 largest customers behind the British blockade, of watching farm exports dwindle to a trickle (while the last war had made the farmer rich), and of finding ways to absorb more Latin 'American products in order to prevent an economic collapse in neighboring countries cut off from customary markets in Europe.

The war has reduced our trade with Continental Europe to a bare trickle. Germany, France, Holland, Belgium, and Italy-all among our 20 best customers in any normal year-are now cut off completely. A few ships still get through to Sweden and an occasional shipload of our exports reaches Switzerland. Portugal buys freely for itself but the British put a stop to any shipments that are out of line with Portugal's normal demands for fear they will reach the Germans. Russia bought more than \$80,000,000 of American machinery and raw materials last year, is still bargaining for oil-drilling equipment, machine tools, and precision instruments. But practically all deliveries to the Soviet Union are now made by way of the Pacific to Vladivostok and, with trouble threatening in the Orient, even this last big Continental European market may be closed.

• Big Bundles for Britain—But while Continental markets have been drying up, Britain has been boosting its purchases to the highest levels since the last war. Out of every \$4 of exports last year, \$1 was destined for Britain. Biggest month was August, when Washington loaded ship after ship with guns and ammunition which had been stowed away in warehouses from the last war, and rushed them to Britain to make up for some of the most serious losses suffered at Dunkerque (see chart opposite).

Not every line of business has shared in the export boom. Automobile manufacturers made up for shrinking passenger car exports with urgent demands for trucks. Airplanes lined the decks of many an outgoing freighter, and others were flown to Europe by the northern

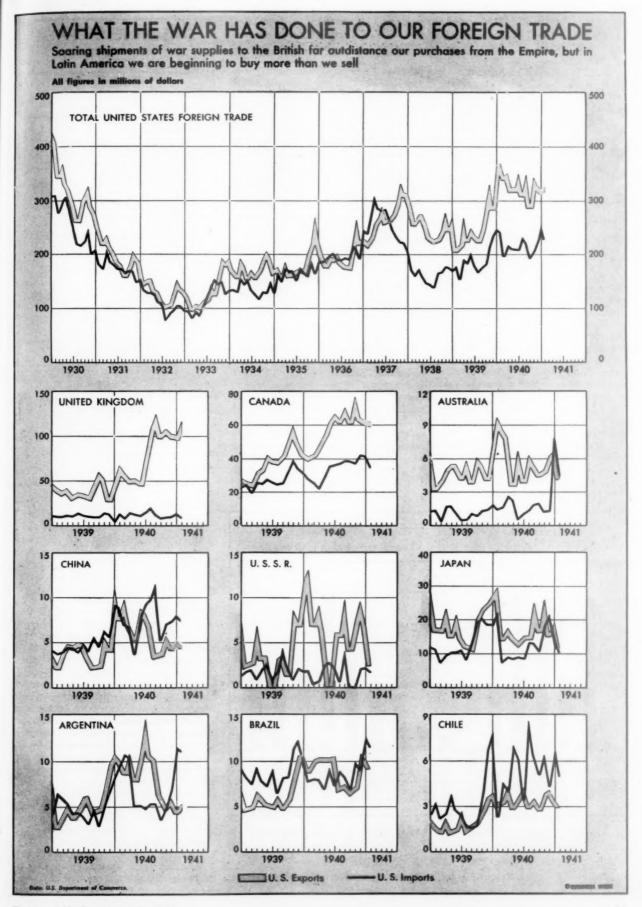
route from Canada or, during the winter, by way of Bermuda. But cotton shipments began to bog down as soon as the crisis at Dunkerque put a premium on shipping space. In the first two mouths of last year, the United States exported \$104,000,000 of cotton. This year in the same period cotton exports amounted to less than \$7,000,000.

• Farm Relief—Though the lease lend law provides \$1,300,000,000 for food and industrial raw materials for Britain, the farmer is still not optimistic about the future. For nearly a year he's been selling less meat, lard, fruit, nuts, grains, and tobacco for export. With Canada's wheat surplus, there's no hope of selling wheat to Britain. And cotton must wait until there are more ships. But the dairy farmer and the fruit grower see some relief ahead, for Washington is already beginning to buy cheese, dried milk and fruits, and canned vegetables to ship to Britain.

The most spectacular foreign trade development so far this year is the sharp decline in exports to Japan. While January sales to the British Empire rose 12%, those to the Nipponese were 40% below December and less than half the total for January, 1940. Several factors are to blame. Most important is the imposition of priorities in the United States on the very items Japan wants most. Machine tools, metals, and alloys top this list. Next, Washington's export licensing system is cutting drastically into Japanese purchases of aviation gasoline, steel products, and copper. Finally. dwindling United States imports from Japan have reduced the dollar exchange available for purchases in America.

• A New Trend—During 1940, exports to Latin America jumped 23%, while our imports from the south increased only 18%. But a new trend is setting in this year. The United States has been buying tremendous quantities of wool and hides from Argentina, Uruguay, and Brazil; copper from Chile and Peru; nitrate and iron ore from Chile; manganese from Brazil and Cuba.

Our imports from Latin America are more likely to expand than to contract in coming months. In 1938, only 38% of the products we took from Latin America were raw materials; by 1940. the figure was up to 52%. Washington is laying in stockpiles of many of the raw materials these neighbors can produce. Bolivian tin will soon begin to arrive in Texas for refining. Chilean nitrate-300,000 tons of it-has been purchased for a fertilizer stockpile and deliveries will soon show up in import figures. Manganese is already arriving from Cuba and, with sugar shipments, has boosted peso exchange to new high levels. Copper is already coming from Chile, and wool has showed up in Argentine imports since last December. Brazil and the other coffee countries have already delivered almost a full



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year's coffee quota. The five Latin American countries from which we bought most heavily last year were Cuba, Brazil, Argentina, Mexico, and Chile. The order may change this year, but not the

Key to the foreign trade situation in the next 6 to 12 months is likely to be the supply of ships.

New Life for Oil?

Prices finally edge up as ordinary consumption hits an all-time high and military needs increase steadily.

Prices of petroleum and its products have, in the last few days, shown the first signs of strength in many, many months except for the brief and rather microscopic bulge the middle of last summer. Retail prices for gasoline have been edging upward, particularly along the Atlantic seaboard, and crude oil quotations generally are a trifle higher.

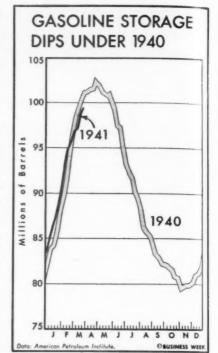
The whole story-or mighty nearly the whole story-is one of record-breaking demand. Ordinary consumption is breaking all records, and military requirements are adding appreciably to the already high total.

• Storage Stocks-Thus, even though gasoline production rose to 142,635,000 bbl, for the first 12 weeks of 1941, compared with 136,166,000 in the same 1940 period, storage stocks have not risen as rapidly as they did a year ago. The United States started this year with about 85,000,000 bbl. of gasoline in storage, a figure 1,142,000 bbl. higher than a year earlier. We produced 6,469, 000 bbl. more in the 12 weeks ended Mar. 22 than in the like 1940 period. Yet storage stocks now are 1,757,000 bbl. under the total at this time a year ago (see chart on this page).

Add those figures up, and it appears that demand for gasoline so far in 1941 has run 9,368,000 bbl. ahead of 1940. That amounts to something over 390,-000,000 gal. of gasoline, a gain of about 8% over the corresponding period of 1940, and it should be borne in mind that consumption last year smashed all records. The United States used nearly 24 billion gallons of gasoline in 1940 compared with 22,666,000,000 in 1939 and 21,232,000,000 as recently as 1937. • The Spring Outlook-We now have storage stocks of gasoline totaling just

under 100,000,000 bbl. (42 gal. to the bbl.) and the period of mounting spring and summer consumption is at hand. Last year the storage peak was 102,452,-000 bbl. on Apr. 27. At that time stocks above 100,000,000 bbl. constituted a fairly serious surplus; this year, due to expanded demand, supplies only slightly smaller look decidedly less burdensome.

How much of the stored gasoline represents aviation grade (100-octane rating or better) nobody is estimating. The government asked for tenders of aviation gasoline for the first half of this year and accepted bids for about 1,500,000 bbl. No second-half bids have



Gasoline stocks in the United States at the start of this year were 1,142,000 bbl. higher than a year earlier. However, demand is at record levels, about 8% over 1940, and storage gasoline now is 1,757,000 bbl. below the level of a year ago.

so far been solicited, so the oil industry is uncertain just how much it will be called upon to supply, although the supposition is that needs will increase sharply and steadily.

• Refiners Go Slowly-Pending more definite indications of Army and Navy requirements for use and emergency storage, the refiners are going slowly. Nevertheless, there is considerable capacity for production of 100 octane gas and most refiners could step up sharply if need were to arise. And that aviation gasoline is going from stills into storage is well known. (The picture on the cover of this Business Week shows the big steel balls for tanking high-octane gas required for airplanes.)

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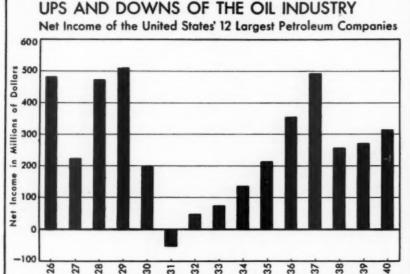
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One important stabilizing factor in this year's petroleum situation is the relative equilibrium in Illinois production. The state's crude oil output seemed to be tapering off early last year only to turn around and shoot up to a peak above 500,000 bbl. the latter part of June. From that point, it dropped equally sharply (BW-Sep.14'40,p16), and recently it has been averaging between 320,000 and 330,000 bbl. a day. Due to this drop in production, less attention has been attracted than might otherwise have been the case by the introduction in the Illinois legislature



Oil company earnings aren't the surest thing in the world. For years the squeeze between higher taxes and lower prices has been a by-word in the industry. Hence it is no great surprise

that, while gasoline production in 1940 was more than double that of 1926, the net earnings of the dozen largest oil companies (charted above) were nearly 36% lower.



• The Central Manufacturers' Mutual is a fire insurance company of Van Wert, Ohio, that is going places ... largely because of an advertising test made four years ago.

In 1937, Central wanted to get greater public acceptance of their name and a larger list of agents. They had to know where advertising would do these jobs best. So they ran a single 72-line test advertisement in seven leading national magazines.

When the returns were in, The Saturday Evening Post had pulled more inquiries than all the other magazines combined. Central's entire appropriation has gone into the Post ever since.

Has this policy paid?

When most insurance companies were showing decreases in 1938, Central had the best year in their history. They gained again in 1939,

increased business more than 20% while adding more and more of the better type representatives to their list of agents.

What Central have discovered is something hundreds of advertisers have known for years: When you want to get a hearing-and actionfrom America, talk to America through the Post. People give your message more attention-and believe it more-when they see it in the Post.

Advertisers said this in other language last year . . . by awarding nearly 9 million dollars more to the Post than to any other magazine.

People pay attention when you put it in the



of a bill which would permit state control over crude-oil output.

• Analysts Are Wary—Financial analysts so far have been reluctant to make any effort to forecast the degree of oil company prosperity for 1941. Results of the first half of 1940 helped make the year look better than 1939, but the final half was nothing to shout about. This year it appears that the first half will run behind the fairly good earnings of the initial six months of 1940, but that the second half (particularly if the higher price trend holds) will be much better than the comparable 1940 period.

Incidentally, gasoline production totaling about 615,000,000,000 bbl. in 1940 was more than double that for 1926. Yet the 12 largest American oil companies earned net of \$310,000,000 in 1940, against \$484,000,000 in 1926.

McK-R Comeback

Behind reorganization that has won court approval is an amazing story of salvaging reputation and assets.

Just a few weeks before Christmas, 1938, newspaper headlines shouted the dramatic story of the looting of a century-old leading drug firm, McKesson & Robbins, by its president, F. D. Coster (BW-Dec.17'38,p15).

At that time the story looked black indeed to the hundreds of McKesson & Robbins securities holders, but this week a happy ending was written. Judge Alfred C. Coxe of the U.S. District Court approved on Monday a plan of reorganization for the company. Only formal approval of securities holders, already given informally to the trustee, remains to complete the first real test of Chapter X of the new Bankruptcy Act.

• Story of Receivership—The \$86,000,000 company was thrown into receivership after its treasurer, the late Julian Thompson, had uncovered a startling string of financial irregularities. After a few days' investigation, President Coster (who proved to be ex-convict Philip Musica) was a suicide in his palatial Fairfield (Conn.) home.

Discovery that the Canadian subsidiary, presumably with crude drug inventories valued on the company's books at several million dollars, consisted of but one office room, a secretary, and no crude drugs led securities holders, in panic, to unload at any price obtainable—which wasn't much. To them, as to most of those shocked by the newspaper accounts, receivership was synonymous with failure and corporate cremation.

• Turn for the Better-Instead of compelling dissolution, the scandal actually



NO. 1 HYDROFORMER

At Texas City, Texas, Pan American Oil Corp. has just completed "the world's first commercial hydroforming unit"—utilizing a catalytic process for "reforming" or converting low octane naphthas into high octane gasolines for cars and planes. Hydroforming is

not another word for hydrogenation (used by Germany in making oil from coal), because it takes hydrogen away from hydrocarbons, whereas hydrogenation adds it. Gasoline from the new plant will be marketed by American Oil Co., while 5,000,000 gal. of byproduct toluene for (TNT) will be added annually to national defense.

forced a turn for the better. That this is so is due largely to even-tempered, quick-thinking William J. Wardall. Appointed to the seemingly-distasteful task of trustee to McKesson, Wardall in 1938 was supposed to work wonders. Not only was he to salvage the assets from the corporate wreckage, but also to build up the corporation in reputation and financial status, and to satisfy all conflicting creditors' groups.

Wardall had been an investment banker until 1932, when he began reorganizing corporations. Success as receiver for the Associated Telephone Utilities had won the confidence of Judge Coxe. The judge promptly tossed the drug company reorganization into Wardall's lan

Wardall's lap.

• Publicity Problem—The deluge of bad news had made McKesson & Robbins the most publicized drug company in the country. It was up to the new trustee to turn this publicity to good advantage—to prove that looting had centered in just one subsidiary and that the purity and value of McK. & R. products had not been affected. One of the new trustee's first acts was to engage publicity counsel. And the publicist's first recommendation was that more publicity, more facts, should be given—an opinion not at first shared by many McKesson directors.

First statements from the trustee were generalized—that the company was sound, that its products were pure, and that the trustee was more interested in assets than in arrests. As the auditors, engineers, and chemists engaged by the trustee to make a most

thorough study (at the cost of more than \$300,000) reported their findings, the trustee released more cogent material.

• Money Recovered—Little of value was recovered from the estate of the deceased Coster, but sizable amounts were retrieved elsewhere. The accounting firm that had failed to unearth the fictitiousness of the Canadian subsidiary, supposed to have been located just a block from their Canadian office, hastened to return \$522,402 fees and expenses. For this, the trustee agreed not to sue the firm for liability resulting from failure to disclose the "crude drug from failure to disclose the "c

to the trustee stock valued at about \$600,000 (for retirement) in return for an agreement that they would not be held personally liable.

The company's personnel was maintained as it had been. Officers, after conferring with the new trustee,

fraud." Directors voluntarily turned in

stopped being jittery. Suppliers, assured that payment would be made of all credits extended, continued to deliver raw materials. And, gradually, competing salesmen stopped their whispering campaign for the ears of retailers and consumers. But it was the confidence inspired by the 66 divisional houses that really fused the organization into a leak-proof unit.

• Local Influence—McKesson had attained its huge size by absorbing many regionally-prominent drug wholesalers whose management had exchanged control for McK-R stock. These units remained loyal and showed local retailers how they could actually capitalize on the fact that a great many customers



MANHATTAN SUNSET

ROY PINNEY

Who said the sun is coming up again?

WATCHING THE SUN SET, the proverbial man from Missouri wouldn't believe it was coming up again... until he saw it do so with his own eyes.

And when Metropolitan invests money for the benefit of policyholders, it adopts that sound old habit of taking nothing for granted. Like the man from Missouri, we want to be shown.

► And that's because our first consideration must be safety. Of course, there is no such thing as an absolutely riskless investment, but we like to be as certain as possible that each investment is a good one. Our staff of investment specialists is better equipped than any individual to investigate proposed investments and therefore should make fewer mistakes.

Of course, all Metropolitan investments are made in accordance with the insurance laws, which wisely limit the fields in which life insurance companies may invest. In addition, all such investments must meet our own investment standards.

► Suppose, for example, that Metropolitan is considering investing a sum

of money in the bonds of an industrial company, or a company distributing light, heat, or power. The first thing we do is to gather all available data about that concern...its financial statements, recent audits, and similar material.

►In many instances, it is necessary to go further... to make a more exhaustive study of the company's management, its position in the trade, its record, and its prospects.

The mass of first-hand, up-to-date information thus obtained is carefully considered by those charged with this responsibility. The recommendations of these men must then be approved by the Finance Committee of Metropolitan's Board of Directors.

Once the securities have been purchased, Metropolitan continues to follow the operations, through annual or interim reports, and to watch trade developments and changes in the industry in which the borrower is engaged. Metropolitan is better able to watch these things than an individual could be, and is better prepared to handle any difficulties that may arise.

► As we said before, safety is the first consideration in all Metropolitan investments. Second to safety, is the income from the investment—the interest that helps pay the cost of your life insurance.

The care with which Metropolitan invests funds for the benefit of its policyholders is reflected in the sound assets which enable the Company to fulfill its obligations.

COPYRIGHT 1841
-METROPOLITAN LIFE INSURANCE CO.

This is Number 36 in a series of advertisements designed to give the public a clearer understanding of how a life insurance company operates. Copies of preceding advertisements in this series will be mailed upon request.

Metropolitan Life Insurance Company

(A MUTUAL COMPANY)

Frederick H. Ecker,

Leroy A. Lincoln,
PRESIDENT



1 MADISON AVENUE, NEW YORK, N. Y.

had become familiar with the name of McKesson & Robbins, no matter in how unsavory a fashion. In the pinch, McKesson collected on the years of hard work which it had spent in building a solid support among the retail fraternity by its sponsorship of various plans to protect the independent druggist's profit on McK & R products. It had been in the forefront of the battle for state fair-trade laws, and the druggists, to whom these price stabilization laws are a sacred cause, didn't forget that yeoman service.

In all respects, the trustee attempted to continue company affairs on a nonreorganization, business-like basis—yet kept busy behind scenes on the build-

up plans.

Results of neglecting no opportunity: The chart of McKesson's drug sales showed almost exact correlation with similar sales for their competitors. Operating statements revealed increasingly high profits. In fact, 1939 results surpassed those of 1938. And the annual report for 1940, issued last week, showed profits highest in the history of the company. Moreover, Mr. Wardall reported that sales and profits for the first three months of 1941 had exceeded those of the corresponding period of 1940.

• The Securities Holders—Great tact was necessary in dealing with the various securities holders' groups. At first, some assumed belligerent attitudes—demanded that their claim be given prior consideration. Mr. Wardall pointed out that the write-off of fictitious assets had erased any residual asset value for the common stock. At the same time, bondholders were shown that the common stock had a very real equity in profits—so they couldn't be frozen out.

All agreed that fixed and preferred charges should be reduced. So a sort of "congressional-swapping" process began. Each interested party, including Mr. Wardall, gave up some of his original demands. A compromise plan, satisfactory to all, was prepared. The Securities and Exchange Commission last week passed favorably on the plan. Judge Coxe on Monday gave court approval. Formal consent of securities holders is expected to be reported May 12.

• Signs of Success—That success is expected of the reorganized company is indicated by the active demand for the old company stocks and bonds, to be traded for the new securities. McKesson & Robbins bonds are selling at a premium of almost 10% above par. The present \$3 Series preference stock, which is to receive 2.3 shares of new common stock for each share of preferred, is in demand around \$27 a share.

And the old common (each share of which is to receive 1 share of new com-

mon) sells above \$3 a share. Net per share on the new common stock would have been well over \$2 on the basis of the 1940 earnings.

Fussiness Pays

As women's hats become more elaborate—this Easter should set a twenty-year high—millinery business improves.

"Women do not buy hats, they buy fashion. They (hats) most certainly do not protect the wearer against rain or

snow or cold. Virtually their sole function is to make the wearer happy in the thought that she has a beautiful thing which is in fashion." Thus spoke Justice Hugo F. Black in last month's Supreme Court decision holding that the Millinery Creators' Guild had violated the antitrust laws in attempting to clausinate design piracy on expensive hats. Not So Funny-Justice Black continued: "Men may joke, but it is this curious quality of 'fashion' which sells hats, and it is, therefore, of great economic value." Just how economically potent fashion is, is demonstrated by the fact that it was a fashion-the little. hood-shaped, untrimmed cloche hat of the 1920's-that dealt the once-prosper-

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DIESEL TOWBOAT

The inland waterways offer, as their equivalent of the ocean-going tramp steamer, the 300-ton, all-welded, diesel-powered towboat Donna Lee—built by the Calumet Shipyard & Dry Dock Co., Chicago. She will ply the Illinois and Mississippi Rivers, pushing barges carrying grain, oil, gravel,

coal, and other bulk commodities. Her ports will be any that yield traffic for her owners, the A. L. Mechling Barge Line of Joliet, Ill. Hardship and privation are no longer the lot of rivermen either, as witness the white-porcelain and stainless-steel electric galley (see below). Innerspring mattresses, three white-tiled bathrooms are provided for the crew of fourteen.



Business Week • April 5, 1941

(Mr. Do-odle had the Answer:)

IS-

"Carrier's Weathermaker is PROVED!"

FOR STORE OR OFFICE





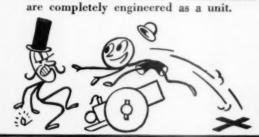


2. Mr. Don'tle: "What's so extra good about Carrier?"

Mr. Do-odle: "For one thing, they're built by the company that developed air conditioning."



3. Mr. Don'tle: "Yes, but aren't all air conditioners pretty much the same?"
Mr. Do-odle: "No. Carrier Weathermakers



4. Mr. Do-odle: "They are built and tested at the Carrier factory — no hodge-podge of assembled parts. What's more, Carrier's Weathermaker is proved . . . with 21 PLUS FEATURES that mean more air conditioning at lower cost through the years."



21 BIG PLUS FEATURES— you'll find in every Carrier Weathermaker. Including (1) Space-saving compactness . . . (2) Money-saving Sub-Cooler . . . (3) 5-Way Air Distribution . . . (4) Oversized Filters for cleaner air . . . (5) Greater cooling at less cost . . . (6) 342 inspections and tests of parts, to insure dependability. Furthermore, you have a choice of 8 sizes to fit your space exactly. For full information including prices send in coupon.

More Air Conditioning for Your Money!



Air Conditioning's First Name

CARRIER CORPORATION Desk 4BW
"Weather Makers to the World"

SYRACUSE, N. Y.

(In Canada: 30 Bloor St., West, Toronto, Ont.)

Without obligation, send complete information on Carrier Air Conditioning.

NAME____

COMPANY____

STREET

CITY____STATE

"Why don't they call them

Traveling Hotels!

THAT'S WHAT Pullmans really are ... "traveling hotels." Guest houses that give you the comforts of easy living en route . . . a night's sleep in a real bed, in the same privacy you enjoy at home; plenty of space to move about; every facility for comfortable dressing and toilet . . . every assurance that you will reach your destination feeling and looking your best!

And remember, too, Pullman gets you there in any weather. Fogs and storms don't impair the continuity of Pullman service . . . and don't give you the feeling that you are unsafe!

Do your traveling the way that gives you the "7 Great Business Travel Advantages" outlined below! Go Rail-and-Pullman and get a bigger return on your travel dollar!

Going Pullman is good business!

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an's hat was a magnificent creation of flowers and feathers, erected on a wireframe and buckram foundation and cost. ing at the minimum about \$3 wholesale. Today the average wholesale price is only a little better than \$1. Before 1920 there were about 45,000 workers in the industry; the 1940 figure was around 25,000.

• Fuss, Feathers-and Profits-Even so. business today is better than it has been in over a decade. Unit sales have not risen much, but hats are getting fussier. Hence, dollar volume is going up. In 1935, the average wholesale price was 81¢, and total production was valued at \$85,000,000. This jumped to \$105,000,-000 in 1939, and observers think that 1940-41 will show about a 20% in-

Milliners now anticipate the most beflowered, befeathered Easter they've known in many a year, with the whole thing wrapped up in what women's style pages blissfully describe as a "mist of veiling." Easter is traditionally the big season for hats. Approximately 25% of all sales are accounted for in two months -March and April. September and October take in another 25% with the launching of new winter models. Consequently about half the total business is drained off in four months-which explains the trade's highly seasonal production and much of its instability.

• Designers Organize-It was for the purpose of bringing order into at least one department of their business-the all-important department of design-that a small group of New York manufacturers of high-priced merchandise (a minimum of \$7.50 per hat wholesale) organized the Millinery Creators Guild in NRA days. They sought to protect themselves against trade tactics which put \$1.95 copies of their expensive models on bargain basement tables almost before the originals were out of the workrooms.

Like the Fashion Originators' Guild in the expensive dress field, the Millinery Guild kept a register of members' designs and "persuaded" retailers to re-fuse to buy from manufacturers who sold pirated versions of those designs. The Federal Trade Commission got inquisitive about this persuasion and issued a cease-and-desist order, charging that the system used by both guilds was illegal restraint of trade. It was this order which the Supreme Court upheld last month.

• Patented Hats?-Now, designers of high-priced hats can find protection for their models only by patenting them. They complain, however, that our system of design patents is slow, cumbersome, and uncertain of result, since many design features are of dubious



Pullman & CENTER - OF - TOWN ARRIVAL, near hotels and center of business.

Ask your ticket agent about Pullman Grand Circle

Plan for trips from coast to coast. Permits cover-

age of entire country at one low rate. Many route

combinations possible.

FAST, FREQUENT SCHEDULESsafest fast transportation in the world.

SERVICE—courteous, efficient and hospitable!

RELIABILITY in meeting appoint

ments. No need to wire cancel-lations or request postponements of business meetings!

"Ist Class" Travel

patentability. Further, a patent is only an invitation to a lawsuit. As a model of what they believe should be done they point to the system of the French government which has rigorously protected the original designs of the great French milliners and dressmakers and penalized pirates. Before the war, these houses were the source of many U. S. models. Large manufacturers would pay \$200 or \$300 for an original model and then turn out several thousand copies to wholesale at \$13.50 a dozen.

• U. S. Designers Pinch Hit-Today, U. S. manufacturers are adapting their designs from the styles set by a meager fistful of high-fashion milliners, whose establishments-almost all in New York City-correspond to the great Paris houses. These have a trade standing even above that of the members of the Millinery Creators' Guild; their creations retail upwards from \$25 or \$30. Some of them have been cooperating with the more plebeian elements in the industry recently in an effort to put New York across as the hat capital of the world. One of them-Sally Victor-even made up an assortment of models this winter and presented them to the trade

as a guide in designing spring lines.

Because fashion, the only essential ingredient of any woman's hat, is an intangible commodity which can be carried around in a designer's head, the millinery industry is a model of free competition—so free that often the only prerequisite for starting out in business is the ability to beg, borrow, or steal a couple of hundred dollars. The 1940 census lists 1,050 manufacturers of women's hats, which means that the average milliner had a sales volume of around \$100,000. But it's doubtful whether even one has an annual business of over \$1,000,000.

• Competition Plagues Trade-Free competition may have its virtues, but in the millinery industry it also has its vices -cut-throat merchandising, bankruptcies and liquidations, and sweat-shop manufacturing (in spite of the workers' high degree of unionization). These are the perennial problems for which answers are sought by the Millinery Stabilization Commission, a stepchild of the NRA, which now represents jointly the unions and manufacturers of the New York-New Jersey area, where 70% of the women's hat manufacturing is done. (About 60% of all U. S. millinery production is concentrated in New York City-the bulk of it within an area of a few blocks.)

The commission's job is to formulate and enforce fair trade practices. It supports itself by the sale of a "Consumer's Protection Label," which guarantees that a hat has been manufactured under fair labor standards. Manufacturers of hats wholesaling below \$13.50 a dozen pay 2¢ a dozen for these, and the price is graded up to 5¢ a dozen for the silk

When you buy Fluorescent... MAKE THE MOST OF IT!



LIGHTING FIXTURES FOR INDUSTRY AND COMMERCE

Here's one easy way to make sure of top performance when you use new fluorescent lighting for your store, office or factory. Insist on fixtures showing the famous FLEUR-O-LIER Certification Label. It certifies that FLEUR-O-LIERS have met with 50 exacting specifications for electrical, mechanical and lighting excellence—as set up by MAZDA lamp manufacturers. Auxiliary control equipment is certified, too, for balanced, reliable operation. Over 75 different designs now available. Ask your electric service company, electrical distributor or contractor—or use coupon below for new booklet and list of manufacturers.

Over 40 leading manufacturers participate in the FLEUR-O-LIER program which is open to any manufacturer who compiles with FLEUR-O-LIER requirements.

FREE! Be sure to read this new booklet before you buy fluorescent lighting. Get the facts about FLEUR-O-LIERS.



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Please send me FREE the new booklet "The Certified Fleur-O-Lier" giving helpful information for stores [offices [and factories [].

NAME

ADDRESS

CITY

STATE

labels in the most expensive models. • War on Hatlessness-The growing toward hatlessness among younger women is one of the industry's biggest worries. New York's glamour debutante of a couple of seasons ago, Brenda Frazier, acquired a reputation for hatlessness, and the effect on sales was disastrous. This year the commission, which spends \$20,000 a year on promotion work, can point to the fact that the three leading debutantes are regularly photographed with hats, except when they wear formal evening gowns. Now the commission is getting ready to invade the college field, where hats have been supplanted by the peasant bandana-or nothing at all. A test campaign in one Eastern women's college last fall convinced the commission that here was a fertile field for missionary work. Outstanding girls were persuaded to wear hats, and lesser lights rapidly followed suit. Next fall, hatters will invade all campuses in a big way. • Enter the Syndicate-The pet bogey

of the Millinery Stabilization Commission is the syndicate. The syndicates are chains which lease millinery departments from department stores for a percentage of sales (usually 20%). The syndicates, which didn't become big factors in the business until the depression, now number around 30, and have been credited with as much as 40% of all retail hat sales. Their volume purchases are largely responsible for the almost-complete disappearance of the jobber

and wholesaler.

The commission accuses the syndicates of using their mass buving power to beat manufacturers' prices down to uneconomic levels. It also contends that they exact retail mark-ups considerably in excess of the 100% which is regarded as average in the millinery business. Finally, it condemns the syndicate system on the ground that it deceives the customer into thinking that she is patronizing a trusted store, when in reality she is buying from the syndicate. A few years ago, FTC investigated the syndicates but took no action against them. Manufacturers say the probe had a salutary effect, however.

Movie Dynamite?

Bill now being pushed in Minnesota seen as threat to peace program charted in industry's consent decree.

A bill in the Minnesota legislature now looms as a real threat to whatever peace was expected to flow from the movie industry's consent decree (BW-Nov.2'40,p15) which takes effect Sept. 1, 1941.

The measure, backed by Allied Thea-

tre Owners of the Northwest (independents), would supersede that part of the decree which requires distributors to license feature films in blocks of five and would force them to license an entire season's output to Minnesota exhibitors without making acceptance of short subjects, news-reels, trailers, etc., a condition.

The bill provides that the exhibitor shall have the right to cancel a minimum of 20% of such features. Each violation would be punishable by a fine of \$1,000 or imprisonment up to one

vear.

• Two Points of View—Supporters of the bill point out that the consent decree does not have the status of a law and that Section XXIII provides that signers are to be relieved of compliance with any requirement of that decree which conflicts with state laws.

Confusing to legislators and lay observers alike is the seeming reversal of the traditional attitudes of the contending parties. The Allied Theatre Owners—most aggressive of the independent groups that have fought block-booking—now appear to be plugging for it (albeit with a 20% cancelation privilege), while the producer-distributors seem to be pulling the other way. How-

ever, the inconsistency is more apparent than real.

• Proponents' Claims—The proponents of the legislation point out that indepent exhibitors and the (affiliated) Motion Picture Theatre Owners Association members alike expressed their opposition to the "blocks of five" clause in the decree before it was ever signed. They cite numerous trade-paper polls which showed an average opposition of 92%. But Mr. Arnold and the consent decree judge paid little or no heed, they assert.

• Objections Being Heard—Opponents foresee great complications and disruption if this little "island of dissent" is set up (or maybe 48 of them) and think that the industry's attempt at self-regulation, as exemplified in the consent decree, would receive a setback

They question the bill's constitutionality as violating the contract clause of the Constitution and claim that it imposes a direct burden on interstate commerce. The eventual confusion, since motion-picture exchange districts transverse state lines, might be insupportable, they say.

What the independents really want is the privilege of buying "at retail" one

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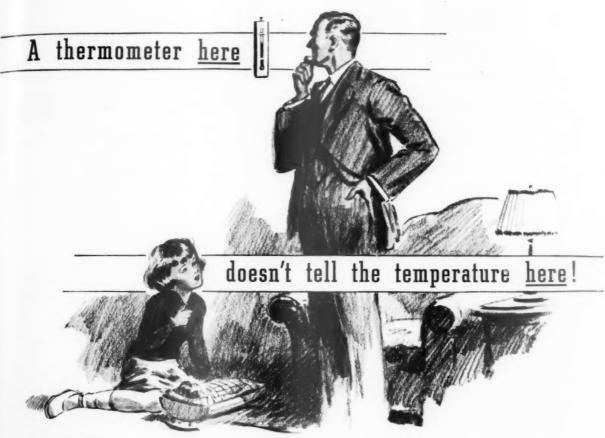
film or 50 as they choose.



"STREAMLINED" BIDDING

The United States Army holds auctions in reverse—one buyer and a lot of sellers—under its new "streamlined" program for procuring necessary materials in a hurry. For years, the federal government bought everything by mailing out invitations for bids, receiving sealed quotations, awarding orders to the lowest bidders. The defense program is responsible for the change. In the case of lumber, for

example, Army procurement officers have been traveling around the country, calling manufacturers and dealers to meetings—usually held in big auction rooms (above, New Orleans). There, they read off items to be purchased for construction projects in that region. Lumbermen write their bids on a slip of paper, officials check the quotations up at the "speaker's table," and awards are made in 15 or 20 minutes instead of the customary 15 or 20 days.



OBVIOUS—isn't it? Our elementary science books tell us that cold air falls, and warm air rises. So the temperature of a room at eye-level may be degrees higher than it is nearer the floor.

This fact of thermodynamics was just as well known in the early days of automatic heating...yet for years the temperature control problem created by the fact went unsolved.

It remained for Penn engineers to "do something about it."

Having the room temperature "right" five feet from the floor is not the important thing at all, they reasoned. While indoors, people spend by far the greater part of their time within four feet of the floor: in easy chairs and on davenports, at desks, at the dinner tablechildren playing right on the floor. THIS is the living zone. Then why not make it the Comfort Zone?

So Penn engineers designed Temtrol—the now famous heat anticipating thermostat—and directed installers to mount it, not at the conventional eye-level, but at table height, just 30 inches above the floor.

As a result the all-important living zone has now become the *Comfort Zone* in homes throughout the country. And as a further result, automatic heating has won greatly increased acceptance, with rapidly growing sales and profits for manufacturers of automatic heating equipment.

The creative engineering which pioneered Comfort Zone Control is evidenced in the complete line of Penn controls for heating, refrigeration, pumps and air compressors. Penn Electric Switch Company, Goshen, Indiana.

Thorough testing under actual operating conditions is a part of all Penn development work.



PENN CONTROLS

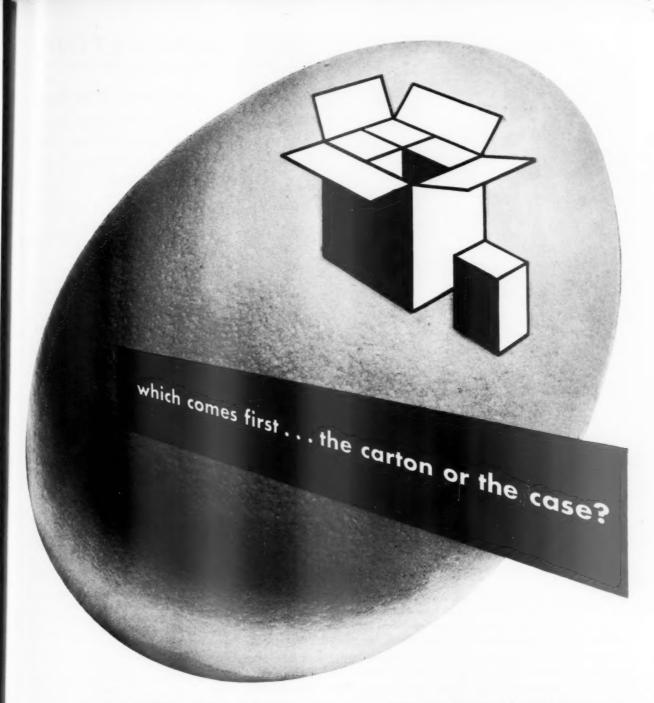
Have You a Control Problem?

Penn engineers, with the most modern resources for research and development work, are ready to devote their creative abilities to the solution of your problems in automatic controls. Why not discuss those problems, without obligation? Write Penn today for details.

THE BUSINESS RECORD, STATE BY STATE

Per Cent Gain or Loss in 1940 Compared With 1939

States by Regional Groups	Passenger Car Sales	Gasoline Concumption	Household Refrigerator Sales	Ordinary Life Insurance Sales	Value of Checks Drawn	Farm Income	Electric Power Output	Heavy Construction
New England	+28	+ 4	+33	- 1	+ 7	+ 1	+7	+ 39
Maine. New Hampshire. Vermont. Massachusetts. Rhode Island. Connecticut.	+36 +30 +32 +20 +20 +46	+ 5 + 3 + 4 + 4 + 3 + 7	+37 +37 +47 +30 +23 +39	+ 2 + 5 + 7 - 5 - 4 + 7	+ 2 + 7 + 7 + 6 + 9 +13	+ 2 - 1 + 1 - 0.4 + 1 + 1	+ 7 + 1 - 7 + 7 +14 +13	+134 - 21 + 8 + 35 +197 + 15
Middle Atlantic	+30	+ 5	+26	+ 2	+ 2	+ 5	+10	- 3
New York	+21 +33 +40	+ 4 + 6 + 7	+16 +43 +33	+ 1 + 4 + 4	+ 1 + 9 +10	+ 6 + 5 + 4	+10 + 5 +14	- 25 + 3 + 54
East North Central	+35	+ 7	+48	+ 3	+10	+ 8	+12	+ 38
Ohio Indiana Illinois Michigan Wisconsin	+39 +34 +27 +39 +35	+ 7 +11 + 6 + 9 + 4	+55 +60 +36 +54 +45	+ 4 + 2 + 3 + 4 + 3	+13 +12 + 6 +19 + 7	+ 5 +11 + 7 + 8 + 8	+11 + 9 +14 +16 + 7	+ 30 + 94 + 10 +117 + 2
West North Central .	+21	+ 5	+38	- 2	+ 6	+12	+ 8	+ 8
Minnesota Iowa Missouri North Dakota South Dakota Nebraska Kansas	+21 +10 +26 +26 +16 +13 +34	+ 6 + 4 + 6 + 16 + 8 + 1 + 5	+47 +39 +29 +33 +23 +41 +38	- 1 - 4 - 4 + 2 + 4 - 0.4 + 0.4	+ 7 + 7 + 6 + 14 + 10 + 2 + 5	+19 +13 +9 +12 +13 +9 +7	+17 + 5 + 0.1 + 8 + 9 +11 + 9	- 33 - 3 + 62 - 7 - 28 - 25 + 61
South Atlantic	+28	+ 9	+38	+ 6	+12	- 3	. +16	+ 69
Delaware Maryland District of Columbia Virginia West Virginia North Carolina South Carolina Georgia Florida	+30 +30 +14 +37 +35 +23 +21 +27 +30	+ 7 + 8 + 13 + 9 + 8 + 7 + 10 + 10 + 12	+62 +35 - 1 +32 +42 +37 +51 +53 +51	- 5 + 5 + 1 + 13 + 6 + 4 + 7 + 11 + 1	+16 +15 + 9 + 7 + 7 +10 +14 +13 +17	+ 4 + 4 + 3 + 3 - 8 - 3 + 7 - 14	+14 +21 + 4 +31 +17 +30 - 7 + 0.1 +14	- 36 + 70 - 41 + 394 + 13 - 4 + 13 + 67 + 153
East South Central	+25	+ 8	+50	- 0.4	+ 9	- 1	+22	+ 89
Kentucky Tennessee Alabama Mississippi	+26 +33 +18 +20	+ 6 +13 + 7 + 4	+45 +43 +62 +59	- 1 + 1 - 2	+ 8 + 6 + 15 + 11	+ 9 + 6 - 1 - 14	+13 +20 +25 - 1	- 3 +281 + 85 + 27
West South Central .	+18	+ 5	+39	- 0.3	+ 5	- 1	+ 7	+ 51
Arkansas Louisiana Oklahoma Texas	+10 +16 +16 +21	+ 5 + 6 + 4 + 6	+65 +33 +19 +43	- 8 - 5 - 2 + 3	+ 4 ' + 3 - 0.3 + 7	+ 2 -16 + 2 + 1	- 3 + 8 + 7 + 6	+ 49 + 30 - 17 + 74
Mountain	+21	+ 6	+53	- 1	+ 4	+ 6	+14	+ 27
Montana Idaho Wyoming. Colorado New Mexico Arizona Utah Nevada	+23 +33 + 8 +12 +21 +34 +26 +24	+ 9 + 7 + 4 + 6 + 8 + 6 + 7 - 0.2	+51 +72 +18 +44 +66 +76 +47 +53	+ 4 + 2 -15 - 1 + 3 - 5 + 4 - 4	+ 6 + 9 + 5 - 0.1 +10 + 6 + 5 +25	+15 + 1 + 8 + 4 +10 + 2 + 3 + 6	+12 + 4 +31 + 4 +13 + 6 +36 +25	+ 0.4 + 19 - 27 + 39 + 22 + 98 + 36 + 7
Pacific	+35	. + 6	+52	+ 1	+ 8	+ 4	+ 6	+ 60
Washington Oregon	+40 +34 +34	+ 8 + 7 + 5	+56 +76 +48	- 2 - 1 + 2	+14 + 6 + 7	- 1 + 4 + 6	+ 8 +17 + 4	+ 24 + 9 + 86
Inited States	+29	+ 6	+39	+ 2	+ 5	+ 5	+11	+ 33



They must be developed together. By adjusting the strength factors of carton and shipping case, and controlling their fabrication, we have cut packaging costs, increased product protection.

Container Corporation's ability to analyze the whole packaging job comes from familiarity with every phase of packaging. We control our own sources of materials, our own paperboard mills

and package factories. We can select — without prejudice—"the one correct package for the job."

May we apply this unique background to your packaging problems? Our plants are located for speedy, efficient production and service. Our staff is ready with new ideas to cut costs, add protection and sales appeal. Arrange a consultation — there's a Container Corporation office near you.

CONTAINER CORPORATION OF AMERICA

CHICAGO, ILLINOIS, AND 21 OTHER STRATEGICALLY LOCATED CITIES

CORRUGATED AND SOLID-FIBRE SHIPPING CASES . FOLDING CARTONS . BOXBOARDS



"... and that night we

SAVED A CONTRACT"



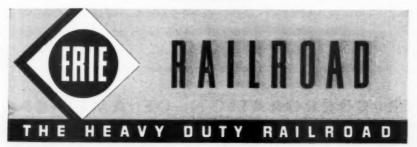
"Snowing great guns, it was, son. But we got through okay. Contractor down east needed parts for a broken steam shovel—and his time limit running out. We pulled into the destination right on schedule. The parts were unloaded and Erie delivered them right to the job. Getting those parts there on time saved that contractor plenty. Sure, I was proud to be conductor on 98 that night!"

The freight must go through safely and on time! That's the creed the Erie conductor works by. And how well he lives up to it is a matter of pride on the Erie. Shooting east and west on fast schedules Erie freights have established amazing records for on-time deliveries.

The conductor guides and guards your freight. But let's not forget the other 22,000 Erie employees. Each man, from trackwalker to executive, helps in his own way to make Erie service "First in Freight" today.

Call the Eric Agent on your next shipment—whatever it may be. Or write

Carl Howe, Vice President, Erie Railroad Cleveland, Ohio



MARKETING

Defense in the Ads

Beyond fad aspect of copy themes may be discerned longterm trends in selling and institutional promotion.

That advertising, which molds public opinion and in turn is molded by it, would be vitally affected by America's all-out defense effort has been inevitable to all in the trade.

Naturally enough, the first interest of agency men, who live by the 15% commission, has been in the effect on the amount rather than on the character of advertising. Reports of rationing abroad and increasingly severe priorities here worried advertisers and agency men particularly in the consumer-goods field. who foresaw the day when the merchandise problem would be one of supply, not demand. Conversely, other advertising men, particularly in the heavy industry field, predicted that wartime taxes would impart a tremendous impetus to the business. But as it becomes increasingly clear that space and time volume will neither be shot to pieces nor suddenly boomed to unprecedented highs, agency executives are finding more time to think about the qualitative effects on advertising.

The first companies to invoke defense as an advertising theme were the manufacturers of heavy goods directly related to war production, prime examples of which are the airplane manufacturers, steel makers, and machinetool producers. Immediate sales have long since ceased to be a problem for most capital goods companies, but they have other problems-maintaining sound public relations, holding down ill will among neglected customers, cultivating future customers, and keeping up the morale of sales organizations. Telling the part a company is playing in national defense is an ideal way of attacking these problems.

• Alcoa, for Example—Last summer (BW—Aug.24'40,p38), an informal survey showed that at least 50 heavy-goods companies were running defense-angled campaigns in business papers, and by now the number has possibly doubled. Outstanding example of how war's impact causes a company to shift its promotion is provided by Aluminum Company of America, whose product was the first which the Office of Production Management put under full priority control.

Since last fall, Alcoa's ads have included a panel carrying this message: "To meet the needs of the National

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Defense Program, plus the normal demands of peace, a vast expansion of our already greatly increased production is being speeded. When the emergency is past, there will be more aluminum available than ever before. . . Meanwhile, if you can't get all the aluminum you want when you want it, remember aluminum is helping to meet the national emergency."

• Expanding the Message—Customer reaction was sympathetic, but company officials felt that it would be desirable to expand the message. This belief was strengthened in February when OPM cut off aluminum supplies to fabricators of such "non-essentials" as kitchen utensils, appliances, and auto parts and when glassware and plastics producers (Corning Glass, Plaskon, and Monsanto Chemical are notable examples) started selling America on their products as substitutes.

• Institutional Ads—Hence, Aluminum Company is interrupting its product copy for a series of institutional ads to develop the point that after the emergency aluminum will be cheaper, more useful, and more plentiful than ever. Users of substitutes were told in the first insertion of the series that production is being rushed so that the shortage will be short-lived. Later ads will include imaginative drawings of the aluminized city, farm, and home of the future.

Among the sellers-to-business who have used the defense theme, few have done so more pertinently than the manufacturers of office equipment. Remington Rand, Underwood Elliott Fisher, Addressograph - Multigraph, Monroe, Burroughs, Ediphone, and Dictaphone are all focusing on "bottlenecks in paper work" and the need for expanding office equipment along with factory equipment.

· Selling to Soldiers-First consumergoods advertisers to grab defense by the tail have been the companies selling direct to soldiers. Manufacturers of shaving supplies (Gillette, Mennen), chewing gum (Wrigley's), / tobacco (Camel, Lucky Strike, Chesterfield, Pall Mall, Raleigh, Webster cigars), clothes (Alligator rainwear, Fortune shoes) and fountain pens (Parker, Wahl) have been among those to advertise to the conscriptee market. Ingersoll-Waterbury brought out a \$4.95 watch called the "Warrior" and has been using soldier characters to promote it for "service on land, sea, and in the air."

Current development is the growing use of defense themes and illustrations as attention-getters by companies only indirectly affected. The Bank of the Manhattan Co. and Hammermill Paper Co. have used tank pictures to stop readers. Best Foods has used a lunching airplane worker with the caption, "Defense Workers Eat Hearty," to promote its Nucoa margarine. And National Lead has started a new campaign

It's SUN HEAT that makes your rooms "like an oven" in summer . . . sun heat that pours in the windows and is trapped inside!



Put KOOLSHADE Sun Screen on your sun-exposed windows... and the delightful coolness of your rooms will astonish everyone who enters them!

When your windows are in the full blast of the fierce, baking sun, KOOL-SHADE stops the heat rays outside... keeps the heat from entering the room. Users say this often makes it as much as 15° cooler!

KOOLSHADE kills unpleasant SUN GLARE, too—and yet it floods the room with soft, diffused light... makes every

room like a "North" room and reduces sun-fading of draperies and furnishings.

What is this amazing KOOLSHADE? It's a scientific bronze fabric as fine as window screening, but made like a tiny Venetian blind. It shuts out heat rays but lets in light; doesn't interfere with view or ventilation. Framed and installed like ordinary screens and KEEPS OUT INSECTS.

Find out about KOOLSHADE now! It's the discovery of the year for Homes, Offices, Factories, Hotels, Hospitals, Schools, Clubs...air-cooled or not.

WITH KOOLSHADE

Try KOOLSHADE on one window... and see for yourself that "It's cooler in the shade."

MAIL THIS COUPON TODAY FOR NAME OF NEARBY KOOLSHADE DISTRIBUTOR

*Trade-mark . . Property of Ingersoll Steel & Disc Division, Borg-Warner Corporation

INGERSOLL STEEL & DISC DIVISION, Dept. (Borg-Warner Corporation)	P4
310 South Michigan Avenue, Chicago, Ill. Please send Free Booklet "How To Make	Ro
Cooler in Summer"	

for its Dutch Boy Pure White Lead Paint built on "The Home Defense of the Minute Man." In the last case, the defense theme was chosen after the agency, Marschalk & Pratt, had tested it against other copy approaches.

• More Than a Copy Trend-Agency men expect that there will be a growing rush to defense advertising by companies only remotely affected-until the novelty wears thin. Then the theme will be left to advertisers directly concerned with the war effort. More important to most agency men than this evanescent copy trend is the possibility that many capital goods industries, having been educated to the advantages of institutional advertising, will continue that kind of company promotion once the war effort is over. Emphasis on public relations in recent years has caused a returning interest in institutional advertising, and the emergency is seen as merely quickening the trend.More Factual—Other l

• More Factual—Other long-range effects that some agency men see are that advertising will become simpler and more factual. Paul T. Cherington, of the management consulting firm of McKinsey & Co., and John P. Cunningham, vice-president of Newell-Emmett Company, gave public expression to this theory at last month's meeting of The Fashion Group in New York.

Mr. Cunningham thinks that the defense program is engendering a "war mentality" among consumers which will end "the era of advertising playfulness." We are getting, he says, "a national attitude that strips the parsley and trimmings off the steaks and wants to get down to fundamentals." He predicts fewer comic strip ads and fewer novelties such as pull-outs and zigzag layouts. • Not Too Much Bragging-Mr. Cherington thinks that as America fixes her national defenses, people are "getting up a set of defenses in their inner selves." He says, "The cold-blooded truth is that words, promises, arguments have taken on new implications and no longer convey simple, direct meanings because they have been used so often in making statements that didn't pan out." Hence, Mr. Cherington thinks that the copywriter will get farthest who doesn't brag too much, but uses informative copy and understates his case.

Radio-Paper Tieup

Boston Sunday Herald and Shepard networks planning joint sale of station time and and space on feature page.

For more than a decade now, newspapers have been faced with the problem of declining advertising revenue. Even in the most prosperous years of



ACTIVITY IN ALUMINUM

What's significant about this pile of bauxite—for the production of aluminum—is not the size of it, but who owns it. The owner's name is on the smokestack in the background—Reynolds. This month, when its new processing plant in Lister, Ala. starts

operation, the Reynolds Metals Co. joins the Aluminum Company of America as a producer of aluminum. Reynolds is also building a Pacific Northwest plant in Longview, Wash.—scheduled to be completed by July 15. And there's a possibility the company will build an aluminum fabricating plant across the river in Oregon.

the thirties, they barely kept even with the game. Publishers have no illusions as to where their business is going. They know the answer is radio. They also know there are two ways to cope with the problem—fight radio tooth and nail and plug newspapers for all they're worth, or, turn around and bring the enemy into the home camp via newspaper-radio tie-ups, frequently via common ownership.

Now, the Boston Sunday Herald is trying a new variation of the second solution. This week the news leaked out that the Herald and John Shepard 3rd's Yankee and Colonial Networks are working out the final formula for a radio-newspaper advertising medium. Idea is to approach advertisers with a proposition that will offer space on the Sunday Herald's "Good Sport Page" and the equivalent in dollars' worth of time on a new radio program, featuring Margaret Ford who edits the page. Advertisers will pay full rates for both newspaper space and radio time.

• Tie-Up May Be Syndicated—Originally, probably only one station—either WNAC or WAAB, the Boston outlets of the Yankee and Colonial Networks—will carry the "Good Sport" show. But the Herald and the Shepard networks are working on a plan for syndicating their deal, and splitting the revenue. If advertisers show enough interest, the program can be extended to the networks' other New England outlets. To complement this expansion, advertisers will then be given a chance to buy the

syndicate rights to the newspaper feature page and plant it in any papers they sign up.

As it's now understood, prospective advertisers will have to be O.K.'d by both parties to the deal before they are signed up. And an advertiser will be required to buy an equal amount of newspaper space and radio time, measured in rate card values.

• Adult Appeal Added—While the "Good Sport Page" now carries children's stories, contests, and other specialties aimed at maintaining interest in its club membership (upwards of 30,000), its tone will be revamped to give it an adult appeal. The radio show will tie in, so that the combined media can be offered as a logical sounding board for such items as radio receivers and sporting goods. Plan is for the radio show to run for two 15-minute periods or one half-hour session weekly.

SMA Idea Works

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Bus

Food of Week tryout in Springfield boosts consumption of surplus items. Lease-lend, however, may curb program.

The Surplus Marketing Administration's big experiment at Springfield, Ill. (BW-Mar.1'41,p34), looks like a success. Paul H. Jordan, SMA regional director, is quite elated over preliminary



American Engines Prove Their Mettle

Direct From the Airdromes of England Comes New Recognition of RELIABILITY as a Vital Military Asset

AY after day, under the relentless pressure of continuous combat, thousands of Pratt & Whitney engines are answering the call of the Royal Air Force with eager power. Report after report reaffirms the ability of these air-cooled engines to take terrific punishment and still continue to pour out dependable power.

This reliability is the natural result of a great American characteristic—the genius for quantity production to high standards of precision. It was the dependability of American air-cooled engines which in peacetime led to their sweeping success on airlines all over the world. Now this same quality becomes vital to the defense of a nation.

Americans can congratulate themselves that this dependability of engine performance is a traditional American quality. It is bred into every Pratt & Whitney engine that goes out to the flying forces of the United States Army and Navy.

UNITED AIRCRAFT CORPORATION

EAST HARTFORD . CONNECTICUT



PRATT & WHITNEY



YOUGHT-SIKORSKY AIRPLANES



NAMILTON STANDARD PROPELLERS

reports on the effort to relieve farm surpluses by boosting one item every seven days as Surplus Food of the Week.

Sales increases in Springfield, reported tentatively on the basis of the preceding average weeks, were as follows for the first three weeks of the drive: Oranges 15.07%, grapefruit 38.8% (the first week was devoted to citrus fruits collectively), pork 9.9%, prunes 237.5%.

On Top of Stamp Plan—To gage the relative possibilities of this plan, lay these percentages of gain alongside the 15% of total population eligible for blue-stamp distribution in stamp-using communities.

In Springfield, the stamp plan was already presumably adding its 15% to local consumption of surpluses. By superimposing the force of Food of the Week drives, Springfield retailers under SMA guidance got the entire community to eating the surplus foods.

nity to eating the surplus foods.

• Subsequent Behavior—Figure sharks are watching sales of these commodities in successive weeks for the real tip-off. Oranges fell back to normal for the week immediately after the promotion, then shot up to the campaign rate of sale in the second week after.

Grapefruit slumped back to normal in both successive weeks. Experience elsewhere on less ambitious campaigns indicates that after a week's slambang promotion, an item gains a new plateau—and stays not far below it thereafter.

Why Percentages Vary—Explanation of the wide variations in percentage increases for the different commodities is troubling no one. Pork was selling well already, because it was notably cheap. Oranges are already the most widely used breakfast fruit, while grapefruit is a comparative also-ran. Strangers to many a table, prunes could therefore skyrocket their percentage on relatively small tonnage increases.

As expected, the Surplus Food of the Week plan is being used elsewhere long before the Springfield test shows conclusive results. Toledo has just now finished its fifth week, Detroit its third. A dozen communities in the Philadelphia area are going great guns with the drive. Plans were matured last week by SMA, in cooperation with national producers' organizations, to open in Chicago on Apr. 21

cago on Apr. 21.

• Haste Now Unlikely—But it looks as though the Department of Agriculture has put the brakes on the ambitious program that was originally planned for Food of the Week. Emphasis on U. S. food under lease-lend has apparently surprised Washington. Best guess is that the D. of A. will study Food of the Week exhaustively before going ahead on a national scale.

It would be pretty silly to hustle surplus eggs, lard, butter, pork, etc. into domestic consumption and then have a real pinch develop on some of them as a result of shipments to Britain.

Appliance Boom

Sales figures explained partly by buying due to fear of shortages and price rises in ranges and refrigerators.

Manufacturers' sales figures on major home appliances, out this week for the first two months of the year, are wonderful to behold:

Refrigerator sales of 683,236 units are up 42.47% over Jan.-Feb. of 1940;

Washing machine sales of 155,546 units are up 9.29%;

Electric range sales of 102,306 units

are up 47.43%

Obviously, the appliance business is booming. But, considering that sales hit all-time highs last year, it seems probable that the manufacturers' figures for this year need to be toned down to get the true retail picture. Electrical Merchandising, making a high-spot survey among retailers and wholesalers, comes to these conclusions: that dealers are accumulating inventories of refrigerators and ranges; that washers are moving rapidly into consumers' hands at approximately the rate of manufacturers' shipments to distributors and retailers.

• Shortages Feared—Reason for the advance buying is that the trade, confident of continuing demand, fears shortages and price increases. Actually, refrigerators have "already been pushed up \$5-\$10, and similar increases are considered likely on ranges. Dealers whose sales are up only 10% to 15% have been order-

ing three times the last year's supply. Reason why dealers haven't bought washers for inventory is because manufacturers haven't been able to supply the goods. Reports are that the retuil movement of washers is the best in history, as good comparatively as that of refrigerators and ranges. Some dealers report that they are over-sold on washers and are being forced to let go their floor samples.

Fitting Willie's Suit

Mail houses now display trend to standardization in sizes and terminology used for consumer's guidance.

Although the annual reports of the two largest mail order houses, just released, show profits down a little from 1939 because of increased taxes, Sears sales are up by \$67,000,000, Ward's up by \$41,000,000. Their sales always rise with payrolls and farm income. But also, the mail-order industry has earned a lot of goodwill by its demonstrated willingness to play along with consumer-movement principles, instead of kicking consumer groups on the shins. · Other Big Units-Chicago, center of the mail-order industry, has two other big units besides Sears and Ward's. Spiegel, Inc., specializes in credit selling. Chicago Mail Order House concentrates on clothing and other soft lines. Within the past year, the catalogs have begun sprouting notably similar terminology and techniques in de-

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HOTPOINT'S MILLIONTH

Production was halted for a special ceremony at the Hotpoint Co. plant in Chicago last week when the one-millionth Hotpoint electric range was finished. Final polish was given the 24-karat gold-trimmed range by the

two employees oldest in service on the Hotpoint range assembly line, before it was turned over to Vice-President R. W. Turnbull (center). The range has already been donated to the Fordendowed museum at Greenfield, Mich., which now houses the first practical electric range made in 1910.



A few oily rags left in the corner of a closet ... slowly storing up a self-generated heat ... suddenly bursting into flames. But for the dog's alarm, this master would have lost his home. This type of fire is not unusual. Plenty of other "self-starting" fires are among the 3000 losses reported daily to the National "Fire Clinic" established by 200 capital stock fire insurance companies. Study of such causes has led to the promotion of better building laws, better fire-fighting facilities, broader public

concern about fire prevention. This and other efforts of these 200 companies must aid in reducing loss by fire; average insurance costs are 40% less than they were thirty years ago.

THE NATIONAL BOARD OF FIRE UNDERWRITERS
85 John Street, New York Established 1866
Nation-wide organization of 200 capital stock fire insurance companies



"Congratulations! While serving our local communities with sound protection, we agents proudly salute the National Board as next month it rounds out 75 years of nation-wide service... and concentrates on fire-proofing the Nation's defense program."



CAPITAL STOCK COMPANY FIRE INSURANCE

The Regional Market Outlook

BOSTON (Income Index-119.8; Month Ago-115.8; Year Ago-106.2) The rapid recovery of New England cotton textile, woolen and worsted, and shoe industries from last spring's markedly low levels is about completed. From now on, only a moderate increase in operating rates may be expected. So, although retail trade in consumer goods towns like Providence, R. I., New Bedford, Lawrence and Lowell, Mass., is sharply higher than it was a year ago,



ST. LOUIS (Income Index-124.2; Month Ago-122.9; Year Ago-110.2) -More and more from now on, increases in district income will depend upon direct armament activity. Such leading industries as steel, building materials, machinery, shoes, clothing, coal, petroleum have about reached stable

operating levels—close to capacity.
For instance, the Memphis area (population 300,000) has grown in importance during the past decade as a center for southern lumbering and agriculture. But now, farm income is not likely to keep pace with industry, and the demand for lumber is at about its peak. More than taking up this slack, the du Pont powder plant at nearby Millington is expanding, Procter & Gamble's shell-loading plant at Milan-95 miles away-will provide some indirect business stimulus, and now Fisher Body will enlarge its Memphis factory for the assembly of bomber

future gains are apt to be less striking. Focal points of current sales expansion are the armament centers, and they are widely distributed. Defense activity does not bulk large in the Boston industrial area (Essex, Middlesex, Norfolk, and Suffolk counties in Massachusetts), which contains nearly one-third of the district's population, and yet within the predominantly consumer-goods vicinity of Boston, there are Quincy, with its shipvards, Watertown, with its arsenal, Everett, with its new supercharger plant, and Lynn and Malden with expanding machinery activity.

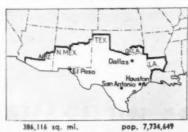
However, most of the plant expansions now taking place-which promise rising payrolls and trade—are concen-trated in Connecticut and such western Massachusetts towns as Worcester, Hol-yoke, Springfield, Pittsfield, Greenfield, Athol, Southbridge. Shipyard employment is increasing at Portsmouth, N. H., Bath and Portland, Me., Groton, Conn.

parts. Probably, too, a new Army depot will be established.

As the mid-continent's center for both railroad and Mississippi river traffic, St. Louis is benefiting from the increase of some 15% in shipments above last year; this has helped it maintain its about-average sales gains. However, in coming months, acceleration of production of tanks, aircraft, small arms, and powder in the St. Louis industrial area should tend to lift prospects.



DALLAS (Income Index - 130.1; Month Ago-128.3; Year Ago-115.0) -The farm outlook continues relatively favorable. Farmers with holdover cot ton are profiting from the recent advance in prices. And with cattle, hog, and sheep quotations at high levels and more livestock on the ranch than a year ago, receipts should rise sharply once ranchers begin to sell. Last year, with prices rising and pasturage excellent, stockmen rebuilt herds that had been



liquidated during the 1939 drought. This business—of holding on to livestock in 1940 and forced sales in 1939explains why last year's shipments fell 13% below the year before.

A new tin smelter at Texas City is the latest of Gulf Coast defense plant awards (BW-Mar.1'41,p8). In particular, more than \$75,000,000 of major new chemical and metal plants and shipyards have been concentrated in Jesse Jones' bailiwick—the 100-mile coastal area between Freeport and

Orange (population 1,000,000).

The district is also cashing in on its mild climate. With but 5.8 nation's population, its military camps and posts will accommodate well over 10% of the nation's armed forces. Retail sales have been stimulated in towns near new cantonments and bases-Alexandria, La., El Paso, Abilene, Mineral Brownwood, San Antonio, Corpus Christi, Palacios, Galveston, Tex.

scribing some characteristics of the All of these merchandise offered. standardizations are in harmony with consumer-group ideas.

Old hands in mail order say that a wave of effort to bring these houses together on non-competitive points comes along every few years, that it always breaks up because rivalry is too fierce to foster any cooperation. For this reason, and also lest they draw hostile fire by appearing to brag, mail-order spokesmen are coy about discussing these developments now.

• Technical Hand Seen-Best guess is that the current epidemic of standardized description traces back to the technical men who test goods, set standards, and generally safeguard customers against possible overenthusiasm of the merchandisers.

About a year back, the catalogs radically shifted their "how to order" measurement instructions and tables. especially on children's clothing. Although there was considerable diversity in the fall catalogs of 1939, those now current agree, for example, that a size 8 knicker suit is for a boy 47 to 49 in. tall and 24 to 26 in. chest measure. Any standards man can tell by looking over the tables that the mail sellers are working toward adopting the age-size standards that the U.S. Bureau of Home Economics developed from the figures obtained when the WPA measured 150,000 children, cooperating closely with American Standards Association.

• Good Business-Use of identical howto-order tables is basically good business because it makes it easier and more attractive for the customer to buy by mail. Also, it automatically causes the merchandise size specifications to conform. If little Willie is an 8 in the Sears catalog, so he is in Spiegel's, Ward's, and C.M.O. This is bound to help out the houses by reducing their returned goods figures.

The houses used to take a terrible beating. Mrs. Customer took a shot in the dark when she ordered a size. Then she returned it and ordered another size. After several exchanges, all at the seller's expense, she got something to fit Willie. Actually, a substantial fraction of the company's inventory of children's clothing was kept in the mails instead of in the stockrooms, and losses from soiled and shopworn lots ran high.

· Washability, Too-Most recent instance of standardized descriptions detected in the catalogs is on washability. Here, the houses are plainly trying to follow the standards originally developed by the American Association of Textile Chemists and Colorists, and fostered by the U.S. Bureau of Standards and the National Retail Dry Goods Association. This spring's editions of Ward's, Spiegel's, and C.M.O. explain washability in practically identical terms, from a low of "dry cleans beautifully" to a high of

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one Busi "Superior Washfastness." (Reported reason why Sears does not yet conform: Its catalog was too far along in printing when these terms were adopted by the other three houses last fall.)

"Fadeproof" no longer exists officially because, as the catalogs explain, "no fabric is entirely resistant to fading."

TIRE-MAKERS CLEARED

The U.S. government got a final thumbs-down this week on its attempt to collect the triple damages available under the federal antitrust laws to any "individual" injured by a conspiracy in restraint of trade. Ruling that the U.S. is not a person under the meaning of the law, the Supreme Court dismissed a government suit against 18 tire manufacturers.

The case dates back to the NRA and the price maintenance policies adopted by the tire industry under the Blue Eagle's wing. In 1937, rubber men discovered that the eagle had laid a posthumous egg, when the governmentannoyed in its role of buyer with the uniform bids consistently submitted on 100 different tire sizes over a period of three years-turned to Sears, Roebuck. Next time the bidding was thrown open, prices were lower and varying. When the government brought suit on the strength of this evidence, the U.S. District Court for the Southern District of New York threw the case out on the ground that the government was not a person (BW-Nov.16'40,p59).

GROCERY FILM EXPANSION

As predicted (BW—Sep.21'40,p32), Standard Brands is rapidly expanding its facilities for distribution and finishing of photo-films in preparation for the big summer snapshot season. Latest move is the opening of a second finishing plant in Chicago (first was in the New York metropolitan area), which means that Standard Brands will now be able to extend film distribution to all its grocery store outlets east of the Rockies. The new plant has capacity for handling 1,000 rolls an hour, which makes it about three-fourths the size of the New York laboratory.

Simultaneously, the company is making plans for its first advertising drive on films—not counting test campaigns. Advertising, via small newspaper space in localities where Standard Brands' film service is available, will start Decoration Day weekend and will continue through the summer until the post-Labor Day slump. Druggists, who grew uneasy last summer when Standard Brands inaugurated the first widespread distribution of films in groceries by making them available to its outlets up and down the Atlantic Seaboard, are more than ever worried by this invasion of one of their most precious preserves.



Is the paper you use as good as the products you sell?

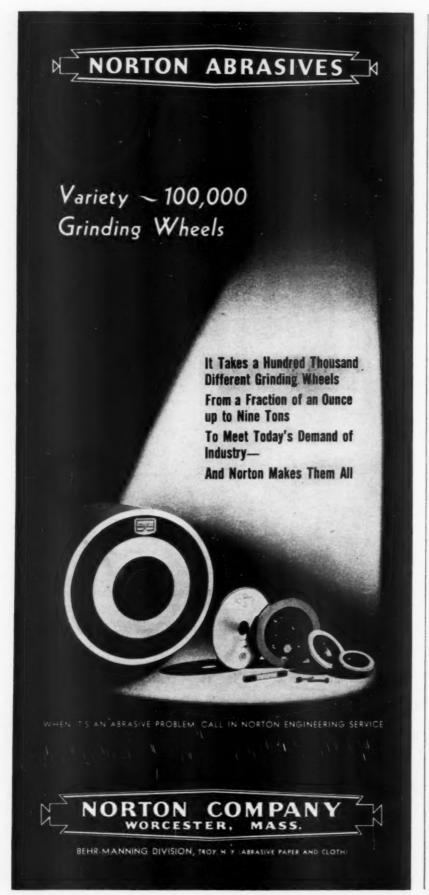
HONEST, NOW, IS IT?

If your answer to this is "No," ask your printer to use a NEENAH paper on your next order. Why use anything else when there is no premium for the best?

NEENAH PAPER COMPANY • Neenah, Wisconsin



Manufacturers of Jine Rag Content Bonds, Lodgers, Index and Lightweights



NEW BUSINESS

• Quick-Frozen Coffee-Bob White Frosted Foods Corp. of New York City has added coffee to the line of quick-frozen foods it markets door-to-door (BW-Apr.13'40,p40). The coffee comes ground and looks like the ordinary grocery store product. The grains remain separated and can be spooned out, but Bob White claims that freezing preserves essential oils which ordinarily will begin to turn rancid a week or so after the usual vacuum-pack container has been opened. Coffee is packed in one pound paper bags, lined with Pliofilm and heat sealed, and should be kept in the refrigerator. The retail price will be 29¢ a lb. delivered to the housewife.

• Lacy Legs—Openweave lace and mesh hosiery for women has never gone over too well, in spite of the fact that it comes closer to that feminine ideal, the runproof stocking, than anything yet devised. Main reason for its lagging popularity has been the lack of clasticity inherent in its design. This makes for a bagginess at knees and ankles that's particularly annoying to slim-legged gals. Triumph Hosiery Co., New York City, has found an answer—a stocking of Lastex-lace, covered with real silk.

The lastex makes for desired snugness of fit. Retailing at around \$1.65 a pair, these super-sheer "Lolita lace" hose have been snapped up by about 50 specialty stores across the country. Something like this has been tried before, but construction was faulty and the stocking went off the market. Retailers, particularly those in the Middle West, report that this one is clicking. • Importers Push U.S. Products-One of the many importers of luxury items put on the spot by the war is Sweden House, Inc., in New York City, which formerly dealt almost exclusively in fine Swedish glassware and china. With stocks of imports dwindling fast, Sweden House has been forced to turn to domestic products. Currently, the firm is exhibiting its first full line of Libbey glass, made by the craftsmen of Libbey-Owens-Ford Glass Co.

The interesting angle is the whole-hearted way Sweden House has gone into the job of opening up a new market for a domestic manufacturer. The house is showing a color motion picture taken in the Libbey factory, plus an exhibit of the steps in production of the Libbey pieces. Invitations to the exhibit give this significant plug to domestic products: "America enters a new era in craftsmanship in glass . . . with a beauty and skill comparable to that of the old world artisans."

• Want a Lift?—Saks-Fifth-Avenue, New York City specialty store, is advertising "Spare Tire Shoes" in its debutante line. An extra pair of heel lifts is given away with every pair purchased. PR

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Vital materials are being conserved as result of new fabrication methods worked out by unsung product engineers.

Over last weekend, the Office of Production Management disclosed a new attack on the problem of finding all possible substitutions and savings of metals vital to defense. This time a special committee of distinguished scientists of the National Academy of Sciences is being asked to add to its completed studies on manganese and nickel a series of studies on aluminum, beryllium, chromium, lead, magnesium, tin, tungsten, zinc, and non-metallic graphite.

Meanwhile, unpublicized, the product engineers of countless manufacturers everywhere are working overtime to develop new designs which will either conserve vital materials or permit substitutions without impairment to appearance, function, or longevity of their products. They work with their eyes wide open to the potentialities of new fabrication methods, new schemes of assembly, new modes of finishing. Frequently, their brand-new designs, whether of defense material, capital goods, or consumer products, show excellences transcending their former creations. Hundreds of examples of new engineering designs are provided in the April issue of McGraw-Hill's Product Engineering.

• Anticipating Needs—Ford engineers, for example, have long since, and perhaps unconsciously, anticipated the current need for all the forge capacity possible for gun shell manufacture by designing automobile crankshafts, camshafts, axles, and other parts formerly drop-forged to be cast out of alloy steel. Engineers of Bakelite Corp. and Eclipse Molded Products Corp. have developed cooperatively a plastic agitator for washing machines which will eventually release millions of pounds of aluminum alloy for defense purposes.

Not generally appreciated is the fact that designing engineers now have at their command a whole new series of faster, better fabrication methods which have sprung into prominence since the last war. Welding, which was mainly a repair method a quarter century ago, is available for high-speed production in one or more of its many forms in practically every shop of consequence. From gas welding have come flame-cutting and flame-hardening of metal parts.

• Induction Heating—Indirectly from electric welding has come induction heating and hardening. Die casting,



offset them by the production economies of speedy, efficient GAS

Rising materials costs are only a challenge to industrial management to find new ways to cut production costs and still meet the most exacting quality standards. Alert executives, faced with the necessity of speeding up production and handicapped by rising material costs, are finding that Gas, with modern Gas equipment, is often the answer to their manufacturing problems.

Whether for heat-treating in the metals field—for firing, annealing or decorating in the ceramic industries —for processing of drugs, chemicals or thousands of other products . . . Gas today is the preferred fuel because it is quick heating, accurately controllable, flexible, clean, and—above all—low in cost.

If you have a special production problem involving industrial heating, your gas company will be glad to consult with you.

AMERICAN GAS ASSOCIATION

INDUSTRIAL and COMMERCIAL
GAS SECTION
420 LEXINGTON AVE., NEW YORK



plastic molding, powdered metallurgy (for gears and gun parts as well as "oilless" automotive bearings) all have come into flower since the first Armistice Day. Modern waterproof plywood was not possible until synthetic resin bonding came along many years after the war.

With the developments in the newer arts have come equally important developments in the older ones like foundry molding and casting, brazing, forging, stamping, and metal spinning. Metal used to be cast in green sand, dry sand, loam, or metal (as in die casting). Now it is also cast centrifugally in fast whirling metal molds to secure extra density, in static permanent metal molds, and even in plaster molds.

• Silver Instead of Tin—New strengths

 Silver Instead of Tin-New strengths came into brazed and soldered joints through the development of "hard solders" which contain silver for their principal ingredient rather than tin.
 New power hammers and automatic presses revolutionize previous ideas of productivity in forging and stamping.

Metal spinning has come back into its own on short runs, as for example in the plant of Milwaukee Metal Spinning Co., where are spun hollow metal doughnuts that are later cut into four 90-deg, segments to become elbows for a welded pipe line. And the up-and-coming designer must keep all these new developments in mind if he is to achieve the right combination of production and product for his employer.

• Wider Choice—Fortunately in ordnance work, there is being permitted a considerably wider choice of designs and production methods this time than last. In drawings for the parts of certain gun mountings, for instance, there can be a choice sometimes of welding or drop forging, sometimes of cast steel or welding. Other designs permit the fabrication into one unit of forgings, castings, and weldings. The former "this or nothing" attitude of both Army and Navy is definitely outmoded.

Assembly of further parts to such fabricated structures is being greatly facilitated by the comparatively recent introduction of "speed nuts" which snap into place without the use of a wrench, and self-tapping screws which cut their own threads in both metals and plastics. Electrical connections are enormously speeded and safeguarded by the use of hard solders and spot welding. • Finishing Methods, Too-Finishing methods have marched right along with fabrication and assembly methods. Where a coat of red lead was considered ample to rustproof the steel in important machines and mechanisms two decades ago, there are now chemical rustproofing and bonding, developed at the behest of the automotive industry. New synthetic resin lacquers of astounding durability flow on over the rustproofed metal parts and take a permanent set in a few minutes under near infra red lights, electric or gas.

Tools for Industry

New devices designed to speed production are among exhibits at show staged in Detroit by the A.S.T.E.

What's the use of holding a machine tool show when the machine tool industry is booked up to its ears? That's what a lot of people wanted to know when they heard about the 1941 Machine & Tool Progress Exhibition, staged by the American Society of Tool Engineers, at Detroit's Convention Hall, Mar. 24–30. It's a good question with a good answer.

Actually, the Detroit show wasn't a machine tool show, because 90% of all machine tool builders belong to the National Machine Tool Builders Association, which restricts its members to its own exhibitions. (N.M.T.B.A.'s policy, intended to save members' time and money, antedates the founding of A.S.T.E. and is nowise directed against

COLLECTIONS COSTLY: EUT COUTA - PUED PAYMENT AS 600 LEASING U.S. FIRST SOL INSTAL-VELOPES replace payment books, monthly statement on Incomment of the Collection of the Coll

So per cent. Write today for samples and Book of 120 letters.

WASSELL ORGANIZATION WESTPORT

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MISCHIEF IN YOUR PLANT?
The harm that uncontrolled dust can do takes many forms . . . direct waste, the slack-

Wooden Mask, Vancouver Island

"This mask represents a wild man of the mountains. The character appears in winter dances of the tribes. He usually acts as a medicine man, and suffers sometimes from attacks of frenzy, breaks away from other dancers and rushes about destroying property."

Indian Art of the United States

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"DUST IN INDUSTRY"

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ening of production speed, inaccuracy of

delicate measurements, increased percent-

age of rejects. Yet, once unmasked, dust is

The Buell Dust Technician is a trained ex-

pert who can help you to discover perhaps

unsuspected ways in which dust, in masque-

rade, is reducing efficiency in your plant.

The Buell Dust Technician is as near as your

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without obligation, what Buell (van Ton-

geren) Dust Collectors have done for many

of America's leading concerns. Let him show

you how efficiently and economically Buell

equipment can work for you.

neither difficult nor expensive to control.

44 · Production

Business Week • April 5, 1941

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Hudson Motor Car Co. this week joined the ranks of auto manufacturers doing sub-contracting work for the aviation industry, announced a contract had been signed under which it would make pistons and rocker arm assemblies for the full production of the New Wright 2,000-hp. Cyclone engines. Above, H. Murray Northrup, chief engineer, and I. B. Swegles, vice-president in charge of manufacturing, look over the precision parts.

it.) Certain old-line builders like Brown & Sharpe and Pratt & Whitney had space at the show, but they showed only gages and other small tools.

• What the Visitors Saw—The Detroit show became a field day for some 250 manufacturers of "industry's working tools," who displayed to 40,000 visitors wide varieties of small tools, gages, inspection devices, accessories, such as chucks and collets, miscellaneous materials and parts, welders, and a few machine tools made by non-members of N.M.T.B.A.

Newest welder came from the shops of Progressive Welder Co., Detroit—an aluminum spot welder which in effect "piles" up all phases of a 3-phase current into one practically instantaneous spot of heat. Two sheets of 0.030-in. aluminum, joined by the process took 475 lb. to tear them apart—or more than double the government requirement of 230 lb.

• For Faster Work—From the West Coast came the Autometric universal jig boring, layout, and inspection machine. Round guide bars secure the alignment of workhead, carriage, and other movable elements of the machine which is the product of Autometric Machine Tool Co., Berkeley, Calif. From the East, where faster production is no less necessary, came the small Holland

\$500 for One of the World's Most Famous Paintings?

What a Value!



Gilbert Quality Papers are Great Values, too!

You need not be an art connoisseur to recognize that it would be a great buying opportunity if you were offered a world-famous painting for \$500. And you need not be a paper specialist to recognize the exceptional values that Gilbert Quality Papers offer for your letter-heads, envelopes, ledgers, bristols, and other business writing needs. Here are the extra values you get when you entrust Gilbert new-cotton-fibre-content papers to carry and protect the daily transactions of your business:

EXTRA PERFORMANCE. Gilbert Quality Papers are made in America's largest mill devoted exclusively to the production of fine new-cotton-fibre-content business papers. This permits concentration on processes, and refinement of materials, that develop impressive appearance, toughness and long life to a superior degree in Gilbert products.

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For every industry where control of stored liquids is an important factor. . . LIQUIDOMETER tank gauges insure dependable, a ccur at e readings at all times.

LIQUIDOMETER remote reading tank gauges automatically indicate or record liquid levels as required. No pumps, valves or auxiliary units needed to read them. Balanced hydraulic transmission system ingeniously compensates for temperature changes on communicating tubing and—accuracy of LIQUIDOMETER tank gauges is unaffected by variations in specific gravity.

LIQUIDOMETER tank gauges are approved by Underwriters' Laboratories and other like bodies for gauging hazardous liquids.

Models are available for Remote Signals, automatic control of pumps, etc. Direct Reading models available where Remote Reading is not required.

> Write for complete details on LIQUIDOMETER Instruments.

THE LIQUIDOMETER CORP

8x16-in. vertical miller, distributed by Marburg Bros., New York, and a small knee-type miller, developed by Jackson Machine & Tool Co., Jackson, Mich.

Shop men were surprised to see hardened tool steel being drilled with relative ease by a new diamond-point tool offered by Black Drill Co., Cleveland. The tool does its stuff mainly by generating enough frictional heat below the drill point to anneal the steel. Though the temperatures are said to reach 4,000 deg. F., they are said to do no harm to the steel.

• Electric Gaging—Standards of accuracy required in the production of aircraft engines, fire control equipment, and artillery fuses have thrust new problems upon the gage industry, now being solved by electric gaging. Both Pratt & Whitney and Sheffield Gage offered multi-dimension comparators with which unskilled operators need only watch a series of lights to know whether a particular piece is over or under any one of a dozen dimensions.

Next year there will be no Tool Show. Present and potential exhibitors persuaded the directors of the American Society of Tool Engineers they were going to be too busy with defense work.

Housing in Slices

Portable cottage for emergency use, developed by TVA, comes in segments with everything in place.

A factory-built portable cottage that is expected to prove its value in defenseemergency housing has been developed by the Tennessee Valley Authority. Six of the cottages have been produced at Muscle Shoals, Ala., for use at Pickwick Dam, southwestern Tennessee.



The portable cottage breaks up into three sections. Above, a third of the house is mounted on a trailer, ready to be hauled away. The load conforms to highway restrictions.

According to formal announcement, the new unit was developed "as a result of continuous studies conducted by TVA almost since its inception to work out the most economical means of housing workers temporarily employed at its construction camps." Earlier, TVA had experimented with cinderblock construction; dwellings built by that method are in use at Norris, Tenn. • Built in Sections-The portable cottages are built in sections, each of which contains one complete portion of the building. Floor, walls, ceilings, 100f, windows, and doors are in place. Electric wiring, light bulbs, and plumbing come already installed. Bathroom and kitchen fixtures, kitchen cabinets, electric cooking plate, and refrigerator are ready for immediate use.

The smaller cottages are in three sections, the larger ones in four. Each sec-



TVA's portable cabin—complete except for screens and power-supply connections. The gang-plank entrance adapts itself to varying grade conditions.

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tion is 71 ft. wide, 22 ft. long, and 91 ft. high, and weighs about three tons. The sections are fitted together with bolts. Construction is wood frame with exterior of weatherproof insulating fiberboard. Four workmen can assemble sections into a completed cottage within four hours. The only parts of the cottage constructed on the ground in the tests were the supporting cinder-block piers. · Easy to Dismantle-Dismantling, TVA said, can be carried out in as short a time as the assembling. A cottage can be transported to another site with no loss except the slight costs of the piers.

The single-cottage model consists of a combination living and bedroom, a kitchen, bath, a small bunk room, and a screened porch. For vacation use, it will accommodate four to five persons. The larger cottage is a duplex, and on each side of the central partition is one large room, a kitchen, and a bath.

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Idea Mill for War

Inventions by thousands are examined by council headed by Kettering, which acts as a military clearing house.

Yankee inventiveness apparently hasn't suffered any serious decline. The National Inventors Council, created last year to act as a clearing house for new instruments of war has so far cast an expert eye on some 15,500 ideas submitted since Oct. 7. In addition, the council has taken the measure of 3,000 other ideas which constituted a backlog built up by the Army before the council came into being, and the council's clerical staff has handled more than 30,000 letters and inquiries.

· Secrecy-Ideas submitted so far are described as covering every phase of modern warfare, and range from Buck Rogers death rays to designs for more comfortable shoes for the buck private. The council won't say how many ideas have been reported back to the Army and Navy as usable. It is likewise silent on the number of completely wacky notions that have turned up. One reason for the council's policy of secrecy is that it doesn't want a low percentage of acceptances to discourage contributions in the future.

• How It Works-Inventions submitted to the council's offices in the Department of Commerce are first scrutinized by a technical staff of engineers. Ideas which seem to have possibilities are reported to the council for final action. Ideas which survive the council sessions are sent back to the appropriate divisions of the Army and Navy, where production plans are formulated in case of acceptance.

• The Council-Chairman of the coun-



THIS TRUCK-TRAILER UNIT REPLACED THREE TRUCKS . . . AND IN ADDITION CUT MILEAGE 30%

HERE is a typical instance of how the Truck-Trailer method works: Pennington Brothers, Inc., now use one truck and Fruehauf Trailer to do the same hauling that previously required three trucks. Think of the savings! Gas, oil and upkeep costs for only one truck . . . Far smaller investment in equipment . . . Far less to write off in depreciation . . . And, above all, a saving each week of more than 700 miles of travel as a result of the more efficient routing made possible by the Truck-Trailer method of hauling.

It's surprising how much you can save and the reason is simple. A truck, like a horse, can pull far more than it can carry -at least three times as much. In short, you can pull your usual load with a smaller truck or you can pull a much larger load with a truck of the same capacity you have been using. Your costs are sure to be lower in either case.

Another source of big savings lies in the use of the "shuttle" system. Instead, say, of using three load-carrying trucks, you use one truck and three Trailers. You leave only the Trailers to be loaded or

Four and one-half million trucks and

three and one-half million trained

trucking men are ready to help de-

fend the nation. Furthermore,

motor transport is supplying a large part of the tax money needed

to build and maintain roads vital

to America's defense.

unloaded and keep the truck busy constantly, pulling first one and then another of the Trailers ready to be moved.

The Truck-Trailer method has proved workable for literally tens of thousands of business men. The chances are great that you, too, will profit by its adoption. Why not call in a Fruehauf man and get the interesting facts?

World's Largest Builders of Truck-Trailers

FRUEHAUF TRAILER CO., DETROIT

Sales and Service in Principal Cities

Factories: Detroit, Kansas City, Les Angeles, Toronte

BEFORE

NUMBER 1 TRUCK made eight round trips each week, traveling 618 miles. NUMBER 2 TRUCK made eight round trips each week, traveling 832 miles.

NUMBER 3 TRUCK made six round trips each week, traveling 1014 miles TOTAL for the three trucks: 2464 miles.

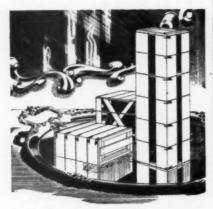
AFTER

Because of the large capacity of the Truck-Trailer unii, this one vehicle handles the deliveries formerly mele by the 3 trucks, essent, many empty return trips are required per week, many empty return trips are elimin-ated. Total weekly mileage covered is 1730.

SAVINGS

dition to the obvious savings in equip-expense and operating costs, the Trailer unit reduced the mileage and 734 miles per week.

"INGINEERED TRANSPORTATION"-Rog. U. S. Pet. Off



How do you serve

• The "right" shipping container can help you give your customers better service. In addition to faster delivery they expect you to provide adequate protection and minimum tare weight.

Hundreds of manufacturers have taken advantage of General Box Laboratory facilities in determining the "right" box, crate or specially designed container for their particular requirements. Important savings in time and materials have been effected, shipments speeded up, damage claims eliminated.

Why not find out how these and other advantages can be obtained for your products? Send for details and the new illustrated booklet today. There is no obligation.

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General Offices: 502 M. Dearborn St., Chicago, Ill. District Offices and Plants: Brooklyn, Cincinnati, Detroit, East St. Louis, Kansas City, Louisville, Miwaukee, New Orleans, Sheboygan, Winchendon. Continental Box Company, Inc.: Houston, Dallas.

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cil is Charles F. Kettering, who also heads technical subcommittees on mechanical power plants and internal combustion engines and on remote control devices. The committee roster includes Gen. W. H. Tschappat, former chief of Army ordnance (ordnance and firearms); Fred Zeder, vice-chairman in charge of engineering, Chrysler Corp. (land transportation, armored vehicles, etc.); Dr. F. M. Feiker, Dean of Engineering, George Washington University (building structures, fortifications, and camouflage); Dr. W. D. Coolidge, director of research, General Electric Co. (geometrical and optical instruments); Dr. Fin Sparre, director of development, du Pont Corp. (chemicals and chemical warfare); Dr. Webster N. Jones, Carnegie Institute of Technology (metals and metallurgy).

• Success So Far-Best index to the number of promising contributions is the number of sessions so far held by the council, most of the members of which are men holding down top executive jobs outside of Washington. Enough cream has come to the top to justify four executive sessions of the council. This, plus the character of the council's personnel, has put an end to rumors that the council was just a figurehead organization designed to keep free-lance inventors from pestering the Army and Navy. The English have found a similar set-up to be worthwhile even though less than 1% of the ideas submitted have proved workable. It was a lay inventor during the last war who developed the idea for the paravane, standard device used on ships for protection against mines.

GREAT LAKES ORDER

Shipbuilders on the Great Lakes have been waiting confidently for a slice of orders, as an outgrowth of the defense program, after many years on a near-starvation diet (BW-Mar.15'41,p20). Last week, two builders were served sizable appetizers-\$10,000,000 in orderswhen they signed contracts to build what the Pittsburgh Steamship Co., a subsidiary of U. S. Steel, announced were to be the five largest ore freighters ever built on the Lakes. Great Lakes Engineering Works will build two of the big carriers-estimated to cost about \$2,000,000 each-at River Rouge, Mich., and American Shipbuilding Co. will build the other three at Lorain, O.

The vessels will be single-screw, double-reduction gear, turbine-driven, bulk freighters. Normal power will be 4,000 shaft horsepower at 90 r.p.m. and maximum power will be 4,400 s.h.p. at 93 r.p.m. Loaded speed in deep water will equal about 13 miles per hour at maximum draft. The ships will measure 640 ft. over all, with a 614-ft. keel length, a 67-ft. beam, a 35-ft. depth, and a maximum loaded draft of 23 ft., 10 in.

NEW PRODUCTS

Glass Protector

As welding operations go into high for defense, the mortality of drop lights broken by weld spatter becomes an expensive nuisance. Meanwhile, John C. Dolph Co., 168 Emmett St., Newark, N. J., has formulated Dolph's No. 253 Clear Glass Coater, a new protecting liquid which dries in 30 min. It is also useful in protecting porthole glass and other glass surfaces against pitting during welding.

Portable Ventilation

Working on the theory that the coolest air in factories, restaurants, and other enclosed spaces is likely to be found



nearest the floor, Reed Unit-Fans, Inc., 811 St. Charles St., New Orleans, keeps its new Port-O-Vent Fan low in height, mounts it on rubber-tired casters for easy moving. It is made in four capacities from 3,500 to 10,200 cfm. All have reversible motors and adjustable louvers to direct air up, down, or straight out.

60th Fraction Figurer

The newest Underwood Sunstrand Adding-Figuring Machine adds or subtracts in 60th fractions instead of decimals, to figure hours and minutes, minutes and seconds, bushels (of wheat), and pounds, etc. As built by Underwood-Elliott-Fisher Co., 1 Park Ave., New York, it has the familiar ten-key keyboard plus an extra key for disconnecting the 60th feature and returning to standard decimal operation.

Condensation Preventative

Insulmat N. 595 is a new plastic compound, containing cork particles, which is sprayed like paint on water pipes, air ducts, ceilings, and sidewalls of storage warehouses, freight cars, trucks, cargo ships, basements, etc., as a preventive of "sweating" and dripping. As formulated by J. W. Mortell Co., Kankakee, Ill., it is self-bonding, requiring neither adhesives nor mechanical supports to attach it firmly to metal surfaces.

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Respirator Eyeshields

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In many dusty or fume-filled atmospheres, there are likely to be flying particles which get into unprotected eyes. Hence, the Mine Safety Appliances Co., Pittsburgh, is bringing out new M.S.A. Respirator Eyeshields,



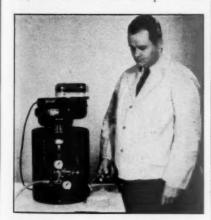
made of clear, non-flammable plastic, to be worn with its Dustfoe and Comfo respirators. Pictured is the one for the Dustfoe.

High-Wattage Lamp

The new Radiant 500-Watt Lamp has the same size bulb and will screw into the same "medium" socket as a standard 200-watt lamp. Radiant Lamp Corp., 368 Sherman Ave., Newark, N. J., makes the bulb of hard glass for increased illumination with present wiring indoors or out.

Laboratory Compressor

Designed especially for laboratory use, the new Kleen-Air Compressor de-



livers 11 cfm. of filtered, odorless air automatically at any pressure desired from 5 to 40 lb. Its rubber-mounted, "sealed-for-life" motor requires no oil-ing. St. Pierre Mfg. Co., 2364 Hamp-den Aye., St. Paul, Minn., builds it with or without two sizes of air reserve tanks and a variety of connections.

KEEP THEM YOUNG WITH HYATTS



and accuracy of manufacture to meet bearing applications of every description. Hyatt Bearings Division, General Motors Sales Corporation, Harrison, N. J., Chicago, Pittsburgh, Detroit and San Francisco.

ROLLER BEA

"There's the Spot!"



THIS man is right. Hundreds of others have said the same thing. And they've been right. Here's the proof.

During the past ten years alone, 1,833 new industries and additions to plants (representing 94 distinctly different kinds of industries) have been established in the territory served by the Norfolk and Western Railway. That's an average of one every other day. And that's steady development . . . even during the darkest days of the depression. (The 1940 record shows the trend: 236 plants! \$230,000,000 investment!)

And yet, the surface in this territory has hardly been scratched. For here is a land where there's plenty of room to grow; a territory rich in the essentials to sound industrial development—an abundance and variety of raw materials, intelligent native labor, a climate for year-around work, plenty of fuel and power, and quick access to the nation's greatest markets by precision railway transportation—East, West, North, and South.

The N. & W.'s Industrial and Agricultural Department at Roanoke, Va., can help you solve your problem of plant location. Write or call for confidential information.

The Territory of the

NORFOLK and
WESTERN
ailway
FOR BETTER PLANT LOCATIONS

LABOR & MANAGEMENT

Engineers-Quick

U.S.-sponsored courses in 132 colleges are now training a technical army to meet specific demands of defense industry.

All-out defense has resulted in a sellers' market for engineering talent. Men with technical training above the high-school level are getting scarcer and scarcer. The high-water mark of defense production is still far in the future. Knudsen predicts that defense employment will increase 60% over the present figure, and Hillman points out that the number of wage earners in manufacturing has risen 1,100,000 since May, '40.

Just as the Army needs officers as well as enlisted men, so does the industrial front require, in addition to welders and riveters and machine-tool operators, a considerable proportion of designers and draftsmen, metallurgists and inspectors, production engineers and supervisors, and others with some technical training. Aviation personnel is now running around 10% engineers.

• No Longer Available - Industry is learning that men of this type are no longer to be found. The latest summary of registration in federal-state employment offices for the entire country lists only 24 aeronautical engineers, 4 marine architects, 20 die designers, 125 electrical draftsmen, 81 metallurgists. 49 tool designers. For several months the U. S. Civil Service Commission has been having difficulty in meeting the demands of federal defense agencies for technical talent. And the big problem of the engineering college is not, as in earlier years, to place its senior students, but rather to keep them on the campus long enough to get their degrees. About one-third of this year's crop of engineering graduates will go directly into the Army or Navy.

Two conclusions are obvious: (1) New recruits in considerable numbers must take on the duties hitherto performed by graduate engineers; (2) industry must up-grade the engineering talent it has and feed the recruits in at lower levels. In both cases intensive training of the kind given in engineering colleges is

needed.

Money Appropriated—Congress recognized the importance of this training by



MA MEETS THE BOYS

Secretary of Labor Frances Perkins does a little field work in California, having just completed a neat inside job in Washington—a job which results in her department rather than Sidney Hillman of the OPM having control over the docket of the National Defense Mediation Board (BW—Mar.29'41,p14). Her scheduled round was almost upset by California's record rains, but she scorned overshoes to greet shipyard workers engaged in drainage operations after the near-flood.

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Business Week • April 5, 1941

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voting, last fall, \$9,000,000 to the U.S. Office of Education to defray the cost of "short engineering courses of college grade . . . designed to meet the shortage of engineers with specialized training in fields essential to the national defense." John W. Studebaker, U.S. Commissioner of Education, has approved more than a thousand separate commodate upwards of 70,000 trainees, most of whom are already enrolled and some of whom will complete their studies within the next few days. The program is still growing, and the colleges are expected to go to town during the summer months.

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These Engineering Defense Training courses are custom-built to meet the needs of specific defense industries or, in some cases, civil service requirements. First responsibility of a participating college is to determine one or more definite needs for defense personnel in its territory. It lines up students accordingly and fits their training to the job to be done. • Scope of Instruction-Naturally, the courses reveal considerable variation. They range from such basic topics as "Engineering Drawing" and "Materials Inspection" to specialties like "Geometric Optics" (by Cornell for the Spen-cer Lens Co.) and "Dynamic Analysis of Servomechanisms" (by M.I.T. for the Watertown Arsenal). They may last for several weeks, or for six months; may be given full-time, or in the evening. Sometimes classes are held on the campus; sometimes in a factory, or in hired quar-

Instruction may be by the college faculty, but often is by the industry itself. West Virginia University is using over 50 instructors representing such firms as the Monsanto Chemical Co., Weirton Steel Co., Fostoria Glass Co., International Nickel Co., Carnegie-Illinois Steel Co., American Viscose Co., National Carbon Co., Libbey-Owens-Ford Glass Co., and Owens-Illinois Glass Co. The University of Pennsylvania has representatives from other familiar corporations ranging from Campbell Soup and Sears Roebuck to SKF, Philco, FCA, and Budd. • Types of Students-Trainees fall into two broad categories: preemployment, for those who want jobs in defense work, and in-service, for those who already have them but can be advanced to higher responsibility. At first, the intention was to put most of the former in full-time classes and to give the latter after-hours training. It hasn't worked out that way. Qualified trainees with the time and money necessary for even a short full-time course can be found only in negligible numbers. (The student must board and room himself, although the federal government pays his tuition.)

Small full-time classes are being filled in parts of the South and West where



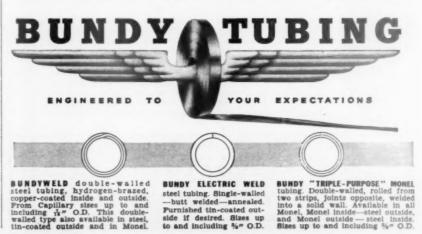
Yes. Daddy's bag has to be ready, for he is a busy Bundy sales engineer. Hurry-up trips are commonplace to him-trips which take him all over the industrial

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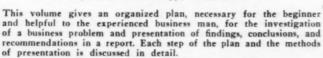


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defense industries are few. But wherever industry is already at work on defense orders it seems that anyone who can face a slide-rule without a quiver already has a job, and can therefore take only part-time instruction. Thus even the pre-employment training (from the defense aspect) must be given after working hours.

• 10% on Full Time—A recent sampling of Engineering Defense Training enrollments showed less than 10% of the trainees were attending on a full-time basis. Pratt & Whitney, desperate for drafting room help, is paying 20 men 50¢ an hour, 40 hours a week for the eight weeks they are spending on a full-time drawing course given by the University of Connecticut.

To attempt to list the companies with employees registered in EDT courses would reproduce Moody. Wayne University in Detroit, for example, has 900 students from 250 industrial plants. Yale is giving 17 courses to between 500 and 600 men from over 100 companies. Cornell has set up courses in Buffalo for Bell Aircraft and Curtiss-Wright; in Elmira for the American Bridge Company; and on the campus in Ithaca for representatives from scattered national defense industries in Courtland, Montour Falls, Geneva, and Binghamton (some of them drive 40 miles to class).

• Pennsylvania Centers—Penn State has established training centers in 47 communities in central and western Pennsylvania, and will give instruction wherever ten students from defense industries will assemble. In the Philadelphia area the University of Pennsylvania, Drexel, Lehigh, Lafayette, Villanova, and Swarthmore are holding classes in plants including those of the J. G. Brill Co. (where trainees were recently passed through a picket line by the C.I.O.), Sun Ship, R.C.A., New York Ship, Philco, Cramp's, Bendix, and Brewster Aeronautic.

Out in the Pacific Northwest, the University of Washington has set up more than 20 courses for Boeing and the Bremerton Navy Yard. The University of California has over 50 courses in such aviation centers as Burbank, San Diego. Santa Monica, Inglewood, and the Westwood.

Defense contractors who are feeling the pinch for technically-trained men would be well-advised to talk it over with the nearest regional adviser of the Engineering Defense Training program. (Names of regional advisers and information about the courses can be obtained from the U. S. Office of Education, Washington, D. C.) It is the job of these advisers—and incidentally they are performing it on a volunteer basis—to help the colleges and the defense industries to get together and, once they have hatched out a course, to steer it through to successful completion.

52 • Labor and Management

Business Week • April 5, 1941

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Proceeding according to schedule, it gives promise of more reasonable (but not probusiness) enforcement.

New changes in administrative and field staff personnel by the National Labor Relations Board, announced last week, signalize a further step in the "reformation" of that controversial agency. Anticipated purging of crusading extremists on NLRB's staff who were chiefly distinguished for an uncompromising anti-business attitude (BW-Feb.15'41,p52) is now well under way and can be expected to continue.

• Witt Appointees Go—The housecleaning is directed against some board agents whose names figured prominently in testimony before the Dies and Smith congressional committees. For the most part, they were appointees of the board's ex-secretary, Nathan Witt, who resigned immediately upon Millis' appointment. Witt has now turned up as an associate of C.I.O. Counsel Lee Pressman.

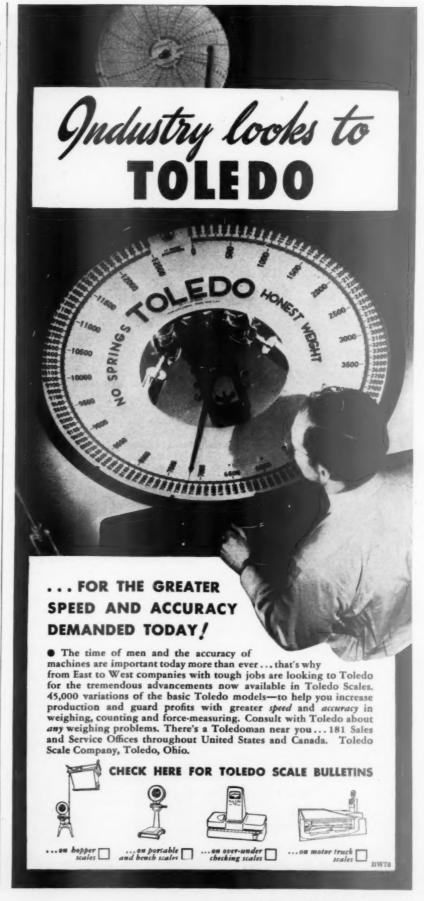
The present purge, like everything else Millis has done in his new post, would have come off with little fanfare except for the third member of NLRB, Edwin Smith. Smith does not pull in harness with Millis and Leiserson, has acted as protector of Witt's friends and defender of Witt's policies. In this latest reform move, he refused to participate, choosing instead to release to the press a letter denouncing the whole business as a plot. There is little prospect that Smith will be reappointed when his present term expires next August. His policies have alienated all but the most leftist of the C.I.O. unions and he has become a thorn in the side of Secretary of Labor Perkins and OPM-man Hillman.

• What It Means—For industry, NLRB's transformation has important consequences. The new set-up promises less "intent to persecute," a motive often attributed to the Witt-dominated Board. From now on, business can expect to find board agents more tolerant of its problems and point of view.

Deport Bridges?

Coast shipowners aren't so enthusiastic over the idea, fearing (1) martyrdom and (2) a more radical successor.

Pacific Coast shipowners are not overly enthusiastic about possible deportation of Harry Bridges, whose trial to discover whether he is deportable under the 1940 Alien Registration Act





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BEFORE THE BATTLE

As the National Labor Relations Board hearings on a petition for a collective bargaining election at the Ford Motor Co. opened in Detroit last week, everything seemed reasonably friendly. United Automobile Workers' Union Counsel Maurice Sugar (left) and Ford Attorney I. A. Capizzi smiled at cameras. U.A.W. President R. J. Thomas stood by (behind Sugar) to document the union's claim to a majority of Ford workers. But this week long-smoldering antagonisms tore off the lid, and action shifted from the hearing room to the streets of Dearborn. U.A.W.'s campaign had led at last to open conflict, as pickets patrolled before Ford gates.

got under way in San Francisco last Monday. More than a year ago, when a Labor Department inquiry headed by James M. Landis found that Bridges was "neither a member of nor affiliated with the Communist Party of the United States of America" (BW-Jan.6 '40,p39), a lot of the shipowners breathed a sigh of relief. The reason was that they feared deportation of the young C.I.O. waterfront leader would make him a symbol of labor martyrdom. • Known vs. Unknown-The martyrdom angle still holds good. Furthermore, through seven years of dealing with Bridges, the owners have come to know his methods and they believe he is veering considerably away from militancy. They point to the current waterfront contract which Bridges negotiated and which is decidedly satisfactory to

In the Australian's second deportation trial, presided over by Judge Charles B. Sears of Brooklyn, Judge Clarence Goodwin, attorney for the Bureau of Immigration, is attempting to prove that Bridges is affiliated with or supports subversive groups whether or not he is a member of them. In 1939, Bridges admitted that he dealt with Communists, but said he did so to aid the waterfront unions and not because he was a Communist.

them. If Bridges goes, they figure, a

more radical leader may take his place.

This week Goodwin said, "His rea-

sons for yielding to this influence are immaterial. The 1940 alien statute equally bans alien membership in and affiliation with such organizations.'

INVESTMENT FACTOR

Scudder, Stevens & Clark, Boston investment counselors, have sent to their clients a report on the labor outlook, stressing that labor problems have grown, and will continue to grow, more important in determining whether any given firm will operate profitably. A special staff member, James A. McCullough, gives full time to assessing the labor policies of firms being considered by Scudder, Stevens & Clark for listing as recommended investments. Annually, Mr. McCullough prepares a lengthy formal report on the all-over picture.

In commenting on the growth of tacit "closed shop deals" between management and unions, the current memorandum says, "People frequently ask why management makes these deals. More than anything else there is a growing conviction that no factory can exist 75% organized and 25% unorganized." In summary, the report observes that "the immediate outlook favors unions," that management is on the defensive; that reversal of this position hinges on the possibility that the unions may "overreach themselves," alienating public opinion and the government.

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NEW NLRB RULINGS

Three new National Labor Relations Board decisions define further the attiude of NLRB toward employer conduct when employees are on strike.

In the Manville-Jenckes Corp. case, the board indicated that it views with suspicion direct communication between an employer and his striking workman. It bans employer requests, directed at individual strikers, to return to work, even if the strike in question has not been caused by an "unfair labor practice.

In the Wilson & Co., Inc. case, where strike ended under an agreement that the company would rehire strikers as vacancies occurred, NLRB ordered that unemployed strikers be given preference over new applicants in filling vacancies subsequent to the termination of the strike.

In the Niles Fire Brick Co. case, the employer was prohibited from dischargng union employees alleged to be insubordinate because they had refused to perform a job from which a union

official had been displaced.

The three rulings tend to strengthen further the union position and flow from the board's concept that the Wagner Act gives affirmative protection to strikes and strikers-a concept that will not be affected by the current purge of 'crusading extremists' on the NLRB's staff (see page 53).

HEINZ SIGNS UP

Ever since 1937, the fight between the H. J. Heinz Co., famous for its "57 Varieties," and Local 325 of the A.F.L. Canning & Pickle Workers (BW-Mar. 29'41,p48) has made big newspaper headlines, plagued the National Labor Relations Board, troubled conciliators and mediators. The trouble spot was that all negotiations ended up without a signed contract. Finally, three months ago, the Supreme Court ruled that Heinz must sign with the union, if agreement was reached on a contract. Negotiations continued; two weeks ago, the union issued a strike ultimatum-"if no contract was forthcoming." Federal and Pennsylvania state conciliators arranged for a two-week truce.

Last week, just before the truce expired, Heinz signed an exclusive bargaining contract with Local 325-the food company's first signed agreement with an "outside" union since the firm was established in 1869-thus ending its historic feud. Under the contract, Local 325 gets (1) recognition as the sole bargaining agent for Heinz workers; (2) a general wage increase for 1,800 production workers; (3) a seniority system; (4) a new vacation set-up; and (5) authority to collect union dues during lunch periods in the employees' dining

room and rest rooms.

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Labor and Management * 55

FINANCE

SEC Legal Tilt?

Showdown on bidding may result from ruling that Dayton P. & L. and Morgan Stanley are emotional affiliates.

Wall Street's long-standing battle with the Securities and Exchange Commission over competitive bidding for new securities issues has entered a new, even though not very different, phase. It's a phase where litigation might quite conceivably supersede argument.

The change was signaled a year ago when SEC asked all interested parties to come in and express their views, offer suggestions. This action was taken under the Public Utility Act of 1935. The commission always has interpreted this law as requiring arm's-length bargaining between holding companies when dealing with investment bankers. That interpretation resulted in Rule U-12F-2. The rule insists that no banking house may receive a fee for underwriting more than 5% of a utility issue if the firm occupies such a position toward the issuer that the banker might have dictated terms of the financing and choice of the underwriter.

• Reason for the Rule—The object of U-12F-2 was to break up the presumably sinister affiliations between banking houses and the holding company systems. That the affiliations were not nearly as close or as sinister as they had been back in the "Roaring Twenties" was largely disregarded. As the SEC read the law, its sense was that arm's-length bargaining must be enforced between a utility issuing securities and a banker who might enjoy the position of a financial or emotional affiliate.

The Investment Bankers Association long has been on record to the effect that the holding company law doesn't command the SEC to do anything of the sort and that, in any event, U-12F-2 is improper. The commission, when it called for interested parties' viewpoints, was not admitting impropriety of the rule but rather its ineffectiveness.

• What Is Affiliation?—The SEC, quite obviously, was up against it on the problem of deciding what constituted an affiliation. Clearly the commission suspected that many bankers, even though they had no financial connection with an issuing company, might enjoy the position of virtual monopoly on the business due to some fairly direct affiliation that had at one time existed.

This suspicion was highlighted at the

end of last week when the SEC finally disposed of one of its most troublesome problems—the status of Morgan Stanley and Co. in the celebrated Dayton Power & Light case (BW—Feb.17'40,p49; Mar.16'40,p68). Morgan Stanley offered \$25,000,000 of bonds for Dayton P. & L. and suggested, when the matter of arm's-length dealing was questioned, that the SEC impound their fees pending the commission's ruling as to "affiliation."

• How Suspicion Arose-Here's how the suspicion of affiliation arose: Dayton P. & L. is owned by Columbia Gas & Electric; 19.6% of the Columbia Gas common is owned by United Corp. (and United Corp. has taken formal steps to convert itself from a holding company into an investment company); United was founded to take over large utility holdings of the Morgan and Bonbright interests more than a decade ago; Morgan Stanley & Co. was the underwriting house formed when J. P. Morgan & Co. was obliged under the Banking Act of 1933 to divorce its investment business from its deposit

In hearings, representatives of Morgan Stanley and of the Dayton company offered sworn testimony that the terms of the issue were determined by independent arm's-length bargaining.

1926=100

Yet the SEC ruled, late last week the there was, in effect, an emotional affition even though no formal financial business affiliation could be proved The decision involves \$100,562

• "Make-Believe"—This, says Morg Stanley, was "not based on facts as what actually happened, but on interest and on what the commission thinks was liable to happen. Such result belongs to the world of main believe." Which would seem to lead believe. Which would seem to lead the plenty of room for suit by Morg Stanley to void the commission finding.

Needless to say, Rule U-12F.2 la proved so hard to enforce that the SE has no very extensive brief in its fau That's why the commission is all a to demand out-and-out competitive be ding for all high-grade issues of secur ties offered by either holding companion or their subsidiaries.

TO POLICYHOLDERS

Another of the trailblazers in the car paign for better life insurance reports policyholders is Metropolitan Life. The company this week mailed out a repofilled with simplified charts, downearth pictures, and readable text the has been widely hailed for its contribtion to the program.

The financial statements, in line with the growing practice among life companies, is presented in simplified term of what the figures mean to the policy holders who own the business.

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Business Week • April 5, 1941

1940

COMMON STOCKS - A WEEKLY RECORD

THE MARKETS

Mix-up in Utilities

There's been some wild and woolly speculation in some of the utility holding company shares in the last three weeks. Groundword for the spree was laid some time ago when the Securities and Exchange Commission made it clear that it was going to disintegrate rather than integrate the holding companies (BW-Mar.1'41,p14).

Next logical step was for some of the companies to take steps toward liquidation. And this brought to light a queer situation. Some of the weaker holding companies might not be making very much money applicable to dividends on their preferred stocks, but in liquidation these same preferreds seemed pretty sure to have substantial values. In other words, the companies in question actually looked to be worth more to preferred stockholders dead than alive.

The following prices give an idea of what happened to some of these preferreds between Mar. 8 and Mar. 29:

	Mar. 8	Mar. 29
Com. & Southern \$3 pfd	524	59
Elec. P & L \$6 pfd	264	30
Elec. P & L \$7 pfd	30	331
Eng. Pub. Ser. \$5 pfd	65	758
Eng. Pub. Ser. \$6 pfd	77	84
Stan. G & E \$6 pfd	111	18
Stan. G & E \$7 pfd	13	20
Un. Lt. & Pr. pfd	223	27±
El. Bond & Sh. \$6 pfd	61	66
El. Bond & Sh. \$5 pfd	53	591

At the very time that these preferred stocks were going up, the common shares of the same systems were shaky to downright weak. The reason was clear. If the companies were to liquidate, and if there wasn't to be enough money to pay off preferreds at par, then nothing would be left for the common

Then came another action of the SEC which sobered things up. In a voluntary reorganization of a small system, the commission ruled that the senior securities need not necessarily get 100¢ on the dollar but rather that some concessions should be made in favor of the common shares.

As things are, nobody knows precisely where holding company preferred and common stocks stand. Probably the SEC will take each case on its own merits.

Security Price Averages

Stocks	This Week	Week Ago	Month Ago	Year Ago
50 Industrial	97.2	97.0	95.5	118.8
20 Railroad	29.6	29.1	28.2	31.0
20 Utility	49.7	50.5	50.4	68.7
Bonds .				
20 Industrial	90.4	90.2	89.9	87.5
20 Railroad	66.7	64.9	62.6	57.9
20 Utility	101.5	101.5	101.0	101.9
U. S. Government.	110.1	110.0	108.9	109.2

Data: Standard & Poor's Corp. except for government bonds which are from the Federal Reserve Bank of New York.



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COMMODITIES

Lid on Scrap Zinc

New price-fixing order is just one more evidence that the metal markets won't be the same for some time.

It's going to be a long time before the metal markets ever are the same again. "Voluntary" top prices now are in force in several markets. Just to make these maximum quotations more effective, the Defense Advisory Commission is putting into effect compulsory top quotations on scrap materials.

The first price-fixing order was on

second-hand machine tools. After this came the first order in the metal markets, that fixing maximum prices for the various grades of scrap aluminum. And this week the controls were extended a bit further when Leon Henderson clamped the lid on scrap zinc while, at the same time, threatening to police other scrap markets as need arises.

• Why Washington Acted-Of late the markets for scrap and secondary slab zinc have paid very little attention to the fact that they should be lower than the price of 71/4 a lb., St. Louis, for primary metal. When secondary began to sell higher than primary slab zinc, threatening to throw the whole market out of kilter, it was obviously a case of the tail wagging the dog. So the Washington authorities stepped in to fix prices on scrap zinc ranging from 4.25¢ to 6.75¢ a lb. and from 7.25¢ to 7.50¢ a lb. on carlots of various grades of secondary slab.

The action was by no means unexpected, for Defense Commission members had conferred with scrap zinc interests on several occasions. At the same time, it dovetails with the many efforts made by the Office of Production Management to iron out the difficult supply situations which have arisen in many metals.

• Domestic Tonnage-Domestic consumption of leading metals, as represented by shipments which closely approximate actual use, continues very high. In February, a short month, copper shipments were 122,000 tons against 124,000 in January, according to American Bureau of Metal Statistics. Lead tonnage was 54,859 against 55,711 in January; zinc ran 59,220 against 63,272.

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John Bull's American Stocks—Sold and Unsold

England began to take over the American stocks of its nationals a little over a year ago. Holders were paid in pounds worth \$4 for shares they had bought with pounds worth

nearly \$5-giving them a bonus of about 20% in pound purchasing power. The British government since has liquidated nearly half the stock issues taken over (although not

necessarily half the over-all dollar value). Here is the list of the American stocks so far sold and those which the British government has still to sell:

STOCKS SOLD*

Air Reduction
Alleg. Ludlum Steel
Allied Chem. & Dye
Alpha Port. Cement
American Can
Amer. Car & Fdry.
Amer. Car & Fdry.
Amer. Gas & Elec.
Amer. Gas & Elec.
Amer. Steel Foundries
Amer. Superpower \$6 pfd.
Armour of Ill. \$6 cv. pfd.
Balwein Loco. Works
Bankers Trust
Beneficial Ind. Loan
Bethlehem Steel

Greyhound
Household Finance
Humble Oil & Refining
Int. Business Machines
Jersey Cent. P. & L. 5½% pfd.
Jones & Laughlin
Kennecott Copper
Kroger Grocery
Lone Star Cement
Louisville & Nashville
Mass. Utilities 5% pfd.
May Department Stores
Midland Steel Prod. 8% pfd.
Minneapolis-Honeywell
Miss. P. & L. 36 pfd.
Montgomery Ward
Nat'l Gity Bank, N. Y.
Nat'l Dairy Products
National Lead
National Steel
Niles Bement Pond
Norfolk & Western
N. American Aviation
North American Co.
Obio Edison 36 pfd.
Ohio Edison 36 pfd.
Ohio Oil 36 pfd.
Ohio Oil 36 pfd.
Ohio Gas & Elec.
Paramount Pic. 6% pfd.
Peninsular Telepbone
J. C. Penney
Philip Morris
Prudential Inv. 36 pfd.
Pullman, Inc.
Pure Oil
R. J. Reynolds "B"
Safeway Stores
Schenley Distillers
So. California Edison
Sperry Corp.
Spiegel, Inc.
L. S. Starrett
Swift & Co.
Texas Corp.
Texas Gulf Sulphur
Tidewater Assoc. Oil
Union Carbide & Carbon
Union Pacific
United Air Cante
United Gas 37 pfd.
U. S. Rubber
U. S. Rubber
U. S. Rubber
U. S. Smelting, Ref. & Mng.
United States Steel
Virginia Rys. (\$25 par) 6%
Walgreen Co.
Worthington Pump
Yale & Towne
Youngstown Steel Door

TAKEN OVER BUT UNSOLD*

Adams Express
Addressograph-Multigraph
Alabama Pr. \$7 pfd.
Allied Stores
Amer. Cyanamid "B"
American Fork & Hoe
American Fork & Hoe
American Home Products
American Loco. \$7 pfd.
American P. & L. \$6 pfd.
American P. & L. \$6 pfd.
American P. & L. \$6 pfd.
Amer. Smelling Mills
Amer. Smelling & Ref.
Amer. S. & R. \$7 pfd.
American Tobacco
American Tobacco "B"
Anaconda Copper
A. T. & S. F. Ry. \$5 pfd.
Alasa Corp.
Atlantic Refining
Atlas Corp.
\$3 pfd.
Blaw-Knox
Borg-Warner
Boston & Albany
Boston Edson
Buffalo, Niagara Pr. \$5 pfd.
Cent. P. & L. (Mass.) \$6 pfd.
Chase National Bank
Chicago Pneumatic Tool
Chrysler Corp.
Cleve. & Pitts. \$3.50 gtd.
Comm'l Investment Trust
Consol. Edison N. Y. \$5 pfd.
Comm'l Investment Trust
Consol. Edison N. Y. \$5 pfd.
Cons. Gas (Baltimore)
Continental Can
Creole Petroleum
Crown Colk & Seal
Crown Zeller. \$5 pfd.
Continental Can
Creole Petroleum
Crown Cork & Seal
Crown Zeller. \$5 pfd.
Continental Can
Creole Petroleum
Crown Cork & Seal
Crown Zeller. \$7 pfd.
Gen'l Amer. Investors \$6 pfd.
Gen'l There. Transportation
Gen'l Cable \$7 pfd.
Gen'l Motors \$5 pfd.
Gen'l Motors \$6 pfd.
Guaranty Trust of N. Y.
Hecla Mining
Houdaille Hersh. \$2.50 "A" * Common stocks unless otherwise designated. Number of shares held unknown.

Ingersoll-Rand Inland Steel Int'l Harvester Int'l Harvester \$7 pfd. Johns-Manville Kalamazoo Stove Kendall Co. \$6 "A" pfd. Lambert Co.
Lehigh Port. Cement
Lehman Corp.
Liggett & Myers
Liggett & Myers
Liggett & Myers
Liggett & Myers
Liggett & Myers Lima Locomotive
Loew's \$6.50 pfd.
R. H. Macy & Co.
Marshall Field
Mueller Brast
Nat'l Bond Invest. \$5 "A"
National Distillers
Nat'l P. & L. \$6 pfd.
New Jersey Zinc
New York Central
Niagara Hudson \$5
Nickel Plate 6% pfd. "A"
No. Ind. Pub. Ser. \$6 pfd.
Omnibus Corp. No. Ind. Pub. Ser. \$6 pfd.
Omnibus Corp.
Pacific G. & E. \$1.50 pfd.
Pacific Lighting
Packard Motor
Pennsylvania Railroad
Penna. Water & Power
Philadelphia Co. 6% pfd.
Phillips Petroleum
Procter & Gamble
Pub. Service of N. J
Pub. Ser. N. J. 35 pfd.
Pub. Ser. N. J. 6% pfd.
Pur.1y Bakeries
Radio Corp. 33.50 pfd.
Republic Steel \$6 pfd. "A"
St. Joseph Lead Republic Steel \$6 St. Joseph Lead Sears, Roebuck Servei Sherwin-Williams Socony Vacuum Southern Pacific Standard Oil (Ci Sterling Products Superheater (Cal.) Saperheater Timken-Detroit Axle Timken-Detroit Axle
Timken Roller Bearing
Union Pacific 4% pfd.
Union Oil (Cal.)
United Carbon
United Corp. \$3 pfd.
United Shoe Machinery
U. S. & Foreign Sec. \$6 pfd.
U. S. Steel \$7 pfd.
Wayne Pump
Westinghouse Air Brake
Woodward Iron Woodward Iron F. W. Woolworth

- 1 -





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CHEMICAL MATERIALS FOR INDUSTRY

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Business

BUSINESS ABROAD

Wanted: Rubber

Developments in Pacific spur continued U.S. efforts to boost stockpile. Synthetics are pushed cautiously.

About the time last winter that the Japanese fleet turned up in the Gulf of Siam and several shiploads of Aussies arrived at Singapore, making the Far East look as though it might blow up any time, an American bomber headed East across the Pacific with 1½ tons of rubber seeds in its cargo.

The bomber stopped over at San Francisco, then headed south across Panama to Brazil where it unloaded its bags of seeds at a cooperative experimental plantation which the Brazilian and United States governments maintain. Washington considered the delivery of these seeds too important to wait for commercial lines to handle the shipment.

• Meeting a Threat—This is one way that Uncle Sam is attempting to meet the threat of being cut off from the region in southeastern Asia where it gets nearly 98% of all of the rubber it uses. Given time—and in the case of the rubber tree this means at least seven years—this country could cover most of its rubber requirements in the tropical parts of this hemisphere.

But Washington can't afford to rely on seven years of peace in the Pacific for the uninterrupted flow of a raw material that is as important to a mobile army as rubber has become.

• Last Year's Tonnage—The United States last year used more than 600,000 tons of rubber. All of it came from troubled Asia except a few thousand tons from Latin America and Africa and about 4,000 tons of synthetic rubber produced at home.

Soon after the war started and the President set up his Office for Production Management, Mr. Stettinius was appointed to head a division which was to see that this country had adequate supplies of raw materials. One of the first things that Mr. Stettinius did was to set up a special Rubber Reserve Co., which was given an RFC loan of \$140,000,000 and told to go out and build a stockpile of raw rubber.

• Stockpile Grows—Huge shipments of rubber have been arriving in American ports for some months. Before the end of this year, our stockpile will amount to 330,000 tons.

A smart rubber trader will tell you that this country can reclaim 300,000

tons of rubber a year from old tires and rubber goods (in 1940 we reclaimed more than 275,000 tons), but this reclaimed rubber is not suitable for all uses because it has lost some of the qualities of fresh natural rubber.

• Sizing Up Synthetics—Synthetic rubber didn't really come into the picture seriously until last fall when Japan moved into French Indo-China and threatened to push on to the East Indies. Then there was a scramble to see just how much we could produce in an emergency, how much it would cost to enlarge our plants, and who would bear the costs of the expensive synthetic product if the threatened shortage of natural rubber failed to develop.

Rubber substitutes today cost about 2½ times as much as crude rubber, but because several of them have peculiar qualities of resistance to oil and acids, they are made commercially and sell for special uses in competition with natural rubber. Goodyear, Goodrich, Firestone, du Pont, Carbide & Carbon, Standard Oil, and Dow Chemical all have special processes, some of them stemming from a petroleum base, others from gas or coal.

• Increasing Capacity—Although production of these chemical rubbers amounted to only 4,000 tons last year, Jesse Jones has declared that, for emergency purposes, capacity will be boosted to 40,000 tons by July 1, 1942. Few

insiders believe that it will be pushed much beyond that figure unless emergencies not now forseeable arise as a result of the war. Goodrich only a week ago announced a modest expansion of its facilities for producing koroseal (its synthetic rubber), but at the same time, B. F. Goodrich declared that it would take this country three years and \$200,000,000 to create the capacity to turn out the 600,000 tons of rubber now needed annually by industry.

Two recent developments indicate that this country has no intention of rushing into the production of substitutes for rubber faster than is warranted by technical improvement of the product and lower production costs which will make it possible for the substitute to compete on an economic basis with the natural product.

• Hemisphere Studies—The Department of Agriculture, working on a \$500,000 appropriation, is carrying on extensive studies in Brazil, Ecuador, Mexico, and Central American countries to find where rubber trees will thrive on a plantation basis. Thousands of trees are growing at experimental sta-

of trees are growing at experimental stations now, and both Mexico and Brazil have appropriated funds to assist in the work.

It will be a long time before rubber can be produced in this hemisphere in quantities sufficient to meet even a small part of the commercial demand but several of the big rubber companies are developing their own plantations in this hemisphere.

• Substitutes—A new division of the OPM has been created to study the



Three thousand tons of lead were hastily loaded aboard a Japanese freighter in San Francisco last week—just before the ban fell on any further exports of lead. From now on the U.S. will be increasing its economic warfare against the Axis, by curtailing the shipment of strategic materials, and buying up foreign supplies of the materials to keep them out of Axis hands.



NAZI NEGOTIATOR

Hellmuth Wohltat, Berlin's ace trade negotiator, will leave for Tokyo soon at the head of a mission which hopes to find "at the other end of the Axis" supplies of many kinds of war materials which have been shut off to Germany by the British blockade. Even optimistic Germans admit that trade will be limited to the capacity of the over-worked Transsiberian Railway across the Soviet Union.

economics of substitute materials. Metals top the study list just now, but before long the committee will throw its searchlight on the synthetic rubber business and try to show just how far it is practicable to develop synthetic rubber capacity as a wartime reserve. With the experiments in natural growth in the tropical parts of this hemisphere already showing encouraging results, insiders believe that synthetic capacity will be boosted cautiously.

Issues for Ottawa

Proposed bonus to curb wheat production greeted with opposition. New tariff problems are also in evidence.

OTTAWA—Application of the United States policy of payment to farmers for not growing agricultural products is running into opposition in Canada. Distrust and dislike of the government's plan for bonusing non-production (BW—Mar.22'41,p79) is being

Hitler's Achilles' Heel

Behind the excitement of the biggest naval battle of this war in which Italy suffered a mortifying defeat at the hands of the British, and the Yugoslav rebuff to Berlin which is Hitler's first diplomatic setback, there is a threat which must seriously perturb leaders in Germany.

Six weeks ago Hitler could look with considerable confidence to the spring (BW-Feb.22'41,p15). Bulgaria was in his lap; London had said publicly that Greece could hardly be expected to stand up against a million Germans with all their roaring Stukas, thundering tanks, and mountains of machine guns; Italy was attempting a fresh attack in Albania; and Churchill had openly said that masses of United States equipment would be needed if England was to face successfully the Nazi onslaught expected soon by air and sea.

Then something happened. Greece refused to be intimidated. The Italian campaign in Albania fizzled, and Mussolini's whole East African empire—from Cheren to Mogadisciobegan to collapse. The day the leaselend bill was signed shiploads of supplies for Britain moved out of United States ports. Russia promised not to attack if Turkey got involved. Then Belgrade stood up to Hitler.

Until last week there was no sign that Hitler intended to allow himself to be caught in a two-front war. He had plenty of unoccupied soldiers, more than enough tanks and planes, and ample ammunition. But he could ill afford to use his limited reserves of gasoline, threaten his main oil supply route from Rumania, and put an additional strain on his weakest rail links—the poorly-ballasted, single-track lines across Hungary, Czechoslovakia, Rumania, and Bulgaria.

As the war went into April German leaders faced a dilemma. Could they afford to take the slur of a Yugoslavian refusal to bow to Nazi demands? And could they afford to let the British get firmly entrenched in Greece, and possibly Yugoslavia, now that the Italian fleet had been virtually swept off the Mediterranean and Italy was collapsing completely as an active military ally?

Only Hitler knew the answer but observers familiar with southeastern Europe saw several reasons why Germans didn't dare loosen their grip on this part of the Continent.

Because of the British blockade the Balkans are Hitler's most important suppliers of key war materials, notably oil. Rumania produces almost twice as much oil as Germany—including the Reich's synthetic output (page 64). Throughout the open season this oil reaches the Reich by Danube tanker. In the winter it goes in limited quantities by rail tank cars. The Danube flows for several hundred miles through northern Yugoslavia. The main rail line from Bucharest to Vienna passes within 50 miles of the Yugoslav frontier.

During the last six years, Germans have carefully encouraged the growing of soy beans in Bulgaria and Rumania. Yugoslavia has always sold the Germans some meat, eggs, and poultry. The successful raids on Denmark, Holland, and France last summer provided Germans with enough food to pull through another winter but, because much of the livestock in those countries had to be killed for lack of fodder, there will be a smaller supply this year. This explains the German reluctance to upset normal production in the southeast-and the desperate need to keep these supply sources open.

Except for France and Poland, no country around Germany is a more important supplier of minerals to the Reich than Yugoslavia. Half of Germany's bauxite for the vital aluminum industry now comes from this Slavic kingdom, and the Reich's most important source of copper is the famous Bors mine, control of which was recently acquired by the Germans. Both reserves are near enough to the Adriatic seacoast for the British navy to help hold them against German attack. In fact, bauxite shipments to Germany last vear were seriously hampered by the Italian demands to Berlin that ore shipments move by rail rather than by sea so as not to attract the British navy into the Adriatic. Yugoslavia also works (with British capital) important lead and zinc deposits.

Hitler obviously planned his attack on Britain this spring on the basis of his present oil reserves. Strategists know these are limited, however, and have speculated freely on the prospect of a Hitler drive to the Near East next fall if Britain successfully stands up under this spring's battering and maintains the blockade. Since London's prospects have been greatly improved in recent weeks (even merchant ship losses have dropped again after the bulge to 150,000 tons three weeks ago), it is reasonable to expect that Hitler will make a special effort to keep his route to the East open.

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registered in parliament, and several of the administration's eastern supporters have bolted the party lineup and are challenging Agricultural Minister Gardiner's proposed bonuses for holding prairie wheat lands out of production.

The bonus policy was announced recently in an effort to curtail the accumulation of unmarketable wheat for which there is insufficient storage space. · Alternative Plan-The parliamentary opposition sponsors an alternative policy of increasing the guaranteed price (70¢) on a stated volume, in order to bring wheat prices in line with other farm products, and then allowing growers to market over-production in whatever way

In addition, the opposition advocates the gift of 100 million bushels of wheat to Britain as a remedy for the carryover, but the administration gives no indication of sympathy for the proposal, first

urged a year ago.

Tariff Worries – Some Canadian manufacturers are disturbed at the possibility of a substantial spread in Canada's tariff preference to Britain. Consideration of preference extension in connection with the new budget stems from Britain's increasing debit balance with Canada. From the start of the war until the end of February, it was \$787,-000,000, and for the twelve months now starting it is estimated at \$1,150,000,-

Canada is providing Britain with Canadian dollars to meet this balance, and it is now proposed that more British goods be admitted as a means of re-

ducing it.

• Anxious for Sales-The British are anxious to increase sales to this continent, and are pointing out that the recently announced war control merger of certain manufacturing lines, notably pottery and textiles, will not interfere with export trade. But prosperous Canadian industries which foresee stronger competition from British goods are put-ting pressure on Ottawa for continued protection.

Other Canadian manufacturers are encountering difficulties with British import controls which threaten the place they had established in the British market. The British market for Canadian footwear, for instance, came to around \$1,000,000 annually before the war. This has since been cut off by a British Board of Trade action which diverted buying to Hong Kong and other eastern colonies to relieve war conditions there.

New Model Ban-Canadians are puzzled as to how quota importation of automobiles will work out next fall unless production of new models is banned in the United States in the meantime. When Ottawa froze Canadian production to 1941 models last fall, it was expected here that similar action would be taken in the United States. Howand Drying PAINTS ENAMELS

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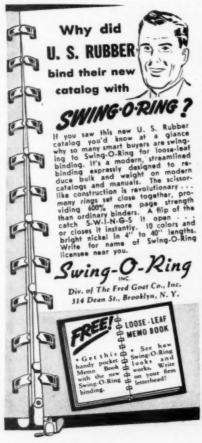


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ever, the question of United States action didn't become a problem until Ottawa modified its war exchange conservation ban on importations.

Beginning Dec. 2, importation of automobiles was forbidden until Hudson and some others moved to reopen Canadian plants. Rather than permit this drain on machine tools and skilled labor, Ottawa established an import quota, in place of the ban, and limited production in plants not in operation prior to December to these import quota volumes—which meant that it wasn't worth while for the Canadian plants to operate.

• Must Decide—Now, unless models are frozen below the border, Ottawa will have to decide whether to revert to import prohibition or lift its model freezing order, as there is no thought that 1942 models not made in Canada will be allowed in to compete with 1941

Canadian models.

Nazi Oil Company

Plans for squeezing out American and British interests on Continent follow now-familiar German economic pattern.

BERLIN—Though Germans this week suffered their most serious diplomatic setback since the outbreak of the war, government planners—undaunted by the bad news from Yugoslavia—announced another postwar reconstruction project which is of special interest to one of the biggest foreign businesses in Continental Europe.

Nazi authorities are setting up a vast new government-controlled oil business which is to be known as Continental Oil Co. Object, according to frank statements in the Berlin press this week, is to put an end to the monopoly control of the oil business on the Continent by the big British and American oil companies. The new company is capitalized at 80,000,000 marks (about \$32,000,000), and is to be headed by Dr. Walther Funk, Minister of Economics.

• Following a Pattern—The government has made no secret of the details of the new project. The company is being set up according to a pattern that is becoming familiar to the German public. The pattern is exemplified by the Hermann Goering Steel Works, in which all of Germany's great steel companies invested a large amount of capital at the time the business was established. The government provided the balance of the capital and offered a part of its shares to the public through the banks.

In the case of Continental Oil, 50,-000,000 marks have been subscribed by the principal German oil producers and distributors, including I. G. Farbenindustrie, Gelsenkirchen, and Wintershal Standard Oil's German subsidiary-German American Oil Co.—was not allowe to participate. Neither were the Germa subsidiaries of the other British an American oil companies which up the time of the war handled in important share of the German business.

• Ministerial Management—The to maining 30,000,000 marks are alread being offered to the public through the banks. But neither the subscribing of companies nor the public will have voice in the selection of the management of the new company. This will be completely in the hands of officials of the Four-Year Plan, the Economic

War, and Air Ministries.

How Hitler intends to squeeze the foreign oil companies out of the monopoly control of the German market is stated bluntly. After the war, made are the control will be allowed to import oil except through the German monopoly. And only Continental (i) abroad in oil production or distribution Rumors from unofficial sources even in dicate Germany intends to take over the equipment of the international oil companies in all occupied territories.

• Reich's Production—Germany itself produces relatively little natural oil. Be fore the outbreak of hostilities, output of natural oil amounted to about 2,000,000 tons a year. Synthetic production (from coal) at that time was also about 2,000,000 tons, but it is believed nor that this has been upped during the litmonths Germany has been shut of from the main foreign sources of supplies.

Since September, 1939, when Germany invaded Poland, the Nazis has brought under their control the most important oil fields of Europe, except those in Russia. Southern Poland produces some oil. There are producing wells in both Austria and Hungary Rumania—with the biggest field in Continental Europe—was producing at the rate of about 7,000,000 tons a year at the time the country was occupied by Hitler troops. In all of these countries the main producing fields were owned and operated by the British and American companies.

• Russian Shipments—In the first trade pact that Moscow made with Berlin following the signing of the non-aggresion treaty in August, 1939, the Soviet agreed to supply Hitler with 1,000,001 tons of oil a year. Best estimates in Berlin now are that the Russians monthan met this quota during the first 12 months the agreement was in effect.

When it was renewed at the end of the first year, the Russians agreed to boost their delivery rate 50%, but it is rumored that since the German occupation of Bulgaria, which is supposed not to have met with Moscow's approval Russian shipments have declined.

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Business Week • April 5, 194

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PROFIT&LOSS

Defense Note: Hats

The Adam hat stores have just aunched a humanitarian, if complicated, promotion stunt based on the theory that a lot of people in this country have old World War helmets gathering dust in their attics. Adam thinks these helmets would do a lot more good in times like these on the heads of British civilians, protecting them during air-raids. So, to get them there, Adam promises that if anyone brings a helmet into any of its stores, an Adam hat will in turn be given to the Salvation Army for distribution to some needy man in the locality; the helmet will be sent promptly to Britain-and maybe even the fellow that brings the helmet in will hang around long enough to buy an Adam hat for himself, too.

Style Note: Hats

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Rabbit fur is apparently a lot more important to the hat industry than you or I realize. It's used in most of the felt that all men's and a good many women's hats are made of. So it's a serious state of affairs when the industry can't get any more of the rabbit and hare fur that used to come from the British Isles, France, Belgium, Russia, Central Europe, and Australia. Because of the war, imports of the fur have been shot to ribbons for nearly a year. The best remedy for this situation, according to the Hat Style News Service, is for the industry to start raising its own rabbits in this country.

The catch is that they can't just raise rabbits for the fur alone because that would make the cost too prohibitive. So the only thing left for the industry to do is conduct a rousing campaign to stimulate the market for rabbit meat as a food item. How about a rabbit stew with every hat?

Trolley

It wasn't long ago that it looked as though the trolley car was going the way of the old horse car—only quicker. But suddenly the trolley is in for a revival—and we are not talking about the new streamlined cars—this time either.

First there's the news of the lady in Portland, Ore.—one Rosa Helemba—who operates a hothouse inside an old street car. She says it's ideal for a hothouse because of all the windows; and, because of its appearance, it attracts a lot of customers. Rosa rings up sales just as the conductor used to ring up fares in the car, and she's already think-

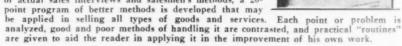


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ing of picking up a few more old cars and expanding her business.



From Milwaukee there is even more rousing trolley news. There, it has become the last word in social occasions to hire a street car to throw a party in. It all got started apparently when some high school kids reuted a trolley for a birthday party. Now it must be really catching on, because there have already been several parties on street cars with bands and dancing—and just recently the company was dickering with a ladies' club in St. Paul which wanted to play bridge in four cars, while they rolled slowly through the city.

The company charges \$3.50 an hour to rent its cars out for social occasions, and has a minimum price of \$10. Most of the functions have to take place outside rush hours, and the company tries to comply with every reasonable request as to the route to follow during a party.

Of course, it isn't the revenue that is important to the company in a stunt like this; it's the fact that there hasn't been an idea in a long time like this one, to make the public conscious of the joys of street-car travel. As a matter of fact there hasn't been an idea to make them conscious of street cars at all.

Addenda

At the request of the chief, the police force of Lower Merion Township, a suburb of Philadelphia, Pa., is currently getting a course of "six short snappy lectures" on the rudiments of salesmanship—Appearance, Approach, and Confidence.

The Dionne Quintuplets are being given their first candy—Baby Ruth bars (advt.).

Variety compliments the New York movie house, now showing a sex film known as "Fools of Desire," for making no pretense about the audience it aims for. Outside the theater is a prominent blow-up of a quote from a review of the picture in Daily Variety: "To vulgar audiences this may have a vulgar appeal."

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THE TRADING POST

Work the Old Machines

Amid all the hurly-burly of getting out new tools and other machinery for the defense job, George T. Trundle, Jr., president, The Trundle Engineering Co., of Cleveland, sounds off on the importance of getting out every last ounce of capacity from existing plant. Speaking to a national defense meeting of the American Society of Mechanical Engineers and the Army Ordnance Association in his home town recently, he made these points in the course of a more detailed and comprehensive discussion of the subject.

The subject assigned to me is "Improvised Methods for Rapid Munitions Manufacture." I am not sure that I quite like that word "improvised."

Let me explain why.

I was brought up on a farm. Any of you who know anything about farming know that when wheat is ripe it has to be cut.

What happened when the binder broke down on the 4th of July, when the wheat already had turned yellow and would have to be cut on the 7th? Did we sit on our hands while we sent to Chicago for a new

We did not. We went to work on that binder. The chances are ten to one that we hooked it together with a few pieces of haywire. Sometimes we had to do better than that. We had a machine shop on our farm, and we could do pretty good repair work.

The point I am making is that we did what we had to do, to get that binder into shape to cut wheat on the 7th of July. And if, by some chance, we simply couldn't get the binder back together again, we got out grandpa's old scythe and cradle and we cradled that wheat by hand.

Now we didn't call those methods "improvised." We took them for granted. If we didn't have the best thing to do the job, we took the next best thing. It never once occurred to us that the job couldn't be done because we didn't have the most modern or the most efficient means of doing it. All we knew was that the wheat had to be cut on time—and we got it cut. And that's exactly the situation confronting industry today in connection with the national defense program.

Now don't think for a moment that I underestimate the tremendous value of new machines in this emergency. We want new machines—all we can possibly get. We need new machines desperately. But we cannot wait to rearm this nation until enough new machinery has been built to re-equip all the national defense plants in this country.

The job is too big. The progress already made in this direction is amazing—but it is still only a start.

The fact is, and we may as well recognize it, that in turning out defense supplies in the quantities and within the time required, most of the plants of this country are going to have to rely very heavily upon the old equipment already installed on factory floors—even though a large share of this equipment may be five, ten, fifteen, or even twenty years old.

So I am concerned with ways and means of making the best possible utilization of the equipment already installed in the factories of this country. We must make this equipment work, and work right now—just as the farmer has to make the binder work when the wheat is ripe.

Think for a moment what we can accomplish by making maximum use of older equipment already on plant floors.

First—We reduce the tremendous demand placed today on machine tool and machinery manufacturers, and I can assure you that any lightening of the load placed on them today would be very welcome.

Second—We lessen the building up of excess plant capacity today which may boomerang tomorrow in the inevitable aftermath that must follow the national defense expansion period.

Third—We reduce the sum total of the taxpayer's bill for national defense—and remember, all of us have to share in paying this bill.

Fourth—We get started on national defense production more quickly. Instead of sitting on our hands and waiting for new machines, we go to work at once making the greatest possible use of such machinery as we now have.

And so I say that in my opinion today, the No. 1 job of every manufacturer engaged directly or indirectly in national defense production is to survey all of the equipment in his own plant, and the equipment in plants to which he might be able to subcontract some of his work. Survey this equipment, figure out just what it can do, get some good maintenance and repair men on the job, get it in first-class working condition, and put it to work.

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Now I don't want for a minute to disparage the importance and usefulness of the new machine. The new, amazing machine tools represent incredible progress in metal working. They are vitally needed today for certain jobs of defense production, which have no counterpart in peace-time production. It takes a special machine, for instance, to bore a big gun. Certain operations in the manufacture of airplane engines require special new machines, both because of the extreme accuracy required and because of the peculiar nature of these operations. Jobs such as these cannot be done on old, existing equipment, even with highly skilled mechanics.

May I urge most earnestly, therefore, that more of these new machines go into the specialized defense production which needs them most, and that those industries which can do their defense production jobs on existing machines put more emphasis on this end of the job, and spend less time waiting for new machines which are much more needed by someone else.

W. C.



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POST-WAR READJUSTMENT

If you were to conduct an association test with the word "war"—if you were to ask a group of people to say the first word that "war" brings into their heads—the probable responses would be "hell", remembering Sherman; or "destruction", remembering what they learned in school; or "death" remembering the Unknown Soldier. It is almost a certainty that not one person in a thousand would say "creation."

• And yet, in its way, war is a marvelous creator, a tremendous energizer. It brings forth, under the goad of patriotism, or hate, or economic interest, a tremendous effort—both in actual combat and on the home front.

In the United States today, as one instance, we are witnessing an unexampled outburst of energy. We are creating a vast new manufacturing machine. Its immediate purpose is to produce planes, ships, and ordnance to subdue Germany. But after the war, this vast new machine will still be with us, waiting to be used.

We dare not forget that this machine is operated by men; that it draws on raw materials and semi-finished goods from the nation's farms, mines, and factories, and on American ships to bring supplies from overseas. And if, suddenly, the energies to carry out a war effort cease to operate, the nation faces the threat of immediate loss of jobs by the men on the farms, in the mines and factories, and aboard the ships. Just as after the last war, demobilization produced dislocations, so may we expect similar problems after this war. Therefore, let's look to what we are doing.

• In the March issue of the Survey of Current Business, Lowell J. Chawner, chief industrial economist of the Bureau of Foreign and Domestic Commerce, observes: "The production of manufacturing capital facilities in the form of plant and equipment, for both public and private ownership, during the first three months of 1941 will exceed that of any previous quarter in our history. If no appreciable decline occurs from the present rate (a slight increase during the second and third quarters seems more likely in terms of the present outlook) the total production of new manufacturing facilities in 1941 may reach \$3,500,000,000." That would compare with \$2,300,000,000 last year; with \$2,700,000,000 in 1929; with \$3,200,000,000 in 1920the all-time peak; with \$2,500,000,000 in 1918, at the height of our productive effort in the first World War.

This presents an astonishing contrast with only a few years back. Here, in the first quarter of 1941, we will create more new manufacturing facilities than were produced in the entire years of 1932 or 1933. In those two years, with production low, profits non-existent, and the incentive to expand private plant at a minimum, no business man wanted to assume the risk of adding to his plant or equipment. He could see little use for additional facilities in the near future.

Today, of course, additions to plant and equipment are not for future production. They are for production now—for instantaneous aid to Britain and the immediate building of our own defenses. But after the war is over, what will happen to these new machines? Will they be allowed to stand idle, or will their very existence create an urgent need to use them?

• After the World War, general economic expansion continued in the United States. The automobile industry provided a dynamic lift—widening the periphery of both production and employment. Furthermore, America participated in the vast reconstruction effort in Europe and aided, through loans, in industrializing and building up South America. Ways were found to utilize the plant expansion of the World War period. And the United States became the leading industrial nation of the world.

It is in that position—as the leading industrial nation of the world—that we are preparing for this war. We are building up our own plant—with both public and private funds. But we are not alone. Great Britain, Germany, Canada, Australia, Japan, and other nations are also building industrial machines as fast as possible. For them, too, war is a great creator.

Unless the newly-erected British and German plants are destroyed in battles to come, both of these nations will possess greatly expanded industrial facilities which will have to be used. And Canada and Australia, with new-found industrial strength, will also look for markets to sell the goods their plants can make. Such tremendous expansion of industrial facilities—telescoped in a few years—cannot help but set the stage for another economic contest for world markets, unless the peace embodies some realistic plan for world utilization of this vast new plant.

• Thus, by compelling nations to build huge industrial machines, which in the post-war epoch will carry on a "peaceful" fight, modern war sows the seeds of its successor. We might as well get that straight now. The problem of post-war readjustment does not resolve down to a simple question: How are we, in the United States, to keep our men at work and our machines operating? It's a far larger issue: How is the whole world, with a vastly improved and enlarged industrial machine to keep its men and its machines busy?

We're getting into a world war. Out of it we must get a world-not an isolationist-peace. Let's put that down as Item No. 1 on our checklist when we talk about post-war readjustment.

(This is one of a series of Trends in which Business Week will discuss from time to time the problems of post-war readjustment now in the making.)

The Editors of Business Week